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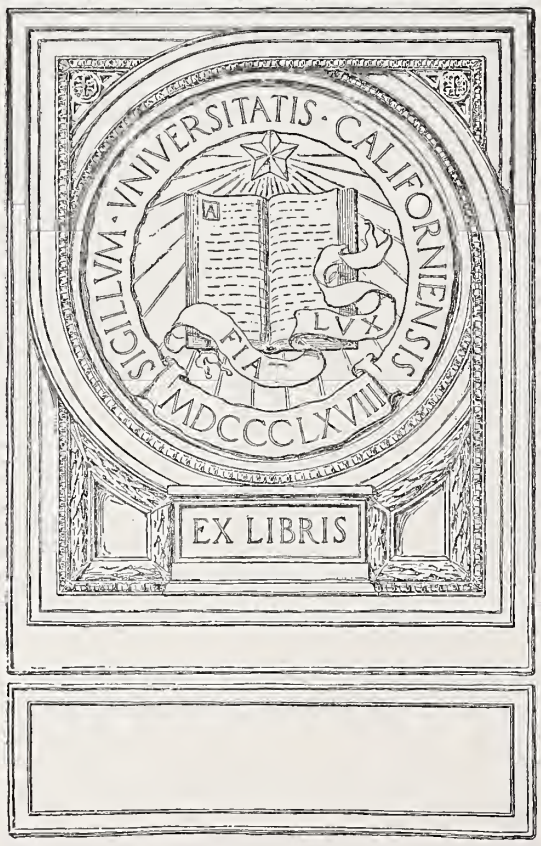

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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

JANUARY / 1964

THE CAPILLARY BED AND SHOCK

See page 3

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PARKE-DAVIS

JANUARY 1964 *Volume 53, Number 1*

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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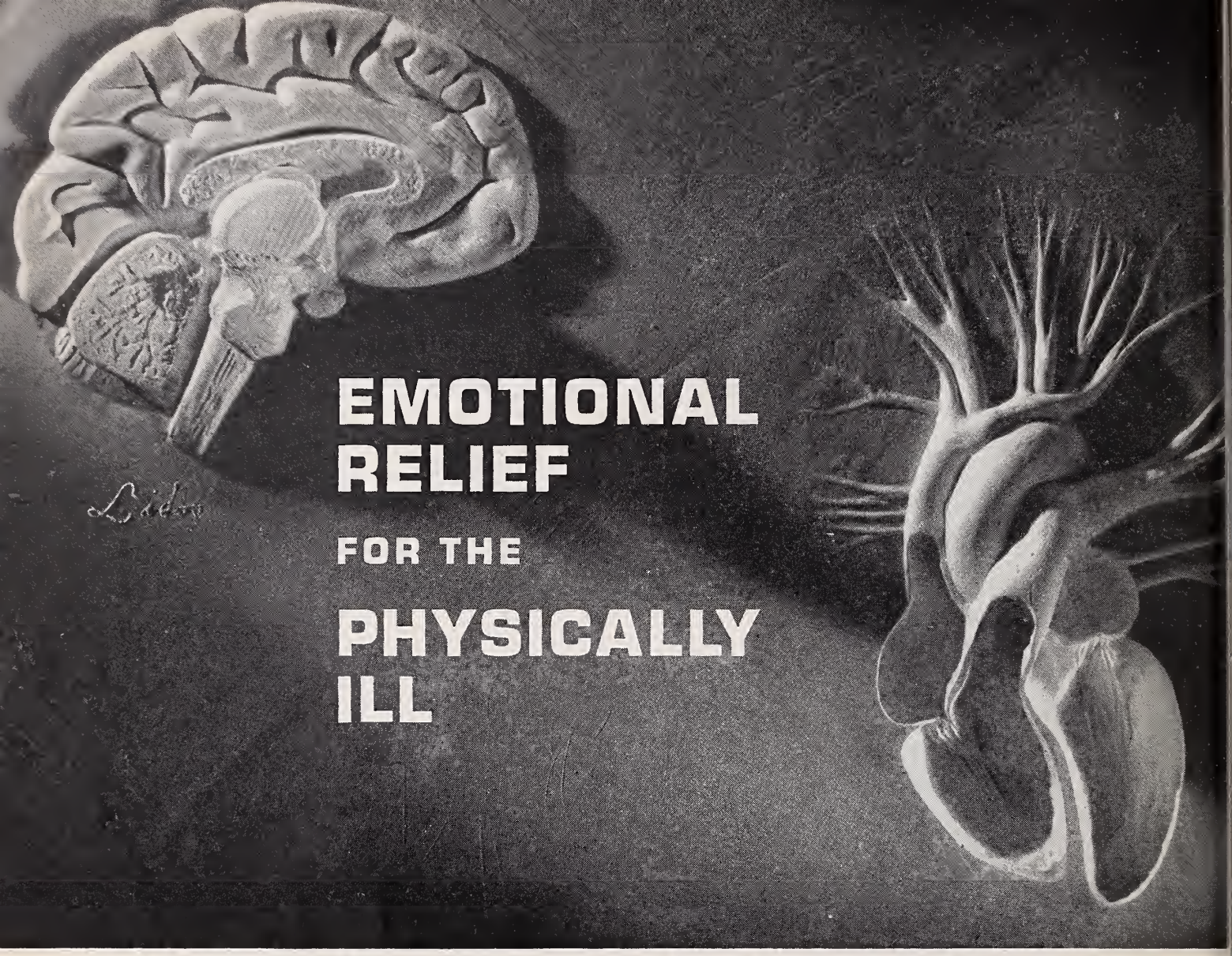

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CLINICAL AND METABOLIC CHANGES FOLLOWING TRAUMA

Robert W. Buxton, M.D., *Baltimore, Maryland*

■ ***In clinical shock, it is the environment of the capillary bed which permits survival or death of tissue cells, and ultimately, the survival or death of the individual.***

THE RESPONSE of patients to injury was first studied intensively toward the end of World War I. The general picture of shock is well known to all physicians and may be simply described by the patient who, after injury, is in a state of mental and physical prostration with marked circulatory disturbance, which may end in death. When this characteristic picture comes on immediately after injury it has been called primary shock; when it occurs after some hours delay, secondary shock. Both primary and secondary shock may show later amelioration with restoration of blood pressure or may progress steadily to death with a continuously failing blood pressure.

Three Phases

It is sometimes advisable to divide the onset and progression of shock into three phases. Price pointed out in 1941 that the initial circulatory depression which follows hemorrhage is for the most part a problem of hemodynamics and is relieved upon correction of the hypovolemia with whole blood—this response could be called the first phase. The second phase is the period of subliminal tissue perfusion which results in a turn to anaerobic metabolism and to a state of progressing metabolic acidosis. In the end, the metabolic cellular insult reaches a degree which kills the cells, in the sense that they cannot recover, and the animal dies. This is the third phase, and it is in this place in which whole-blood replacement fails to restore the animal to life. At this point shock is said to be irreversible.

Characteristically, a clear definition of these phases and the progression of shock into a state of therapeutic irreversibility can be outlined only in the laboratory and on experimental subjects; nonetheless, the term shock implies a clinical description of a series of disturbances which occur in both animals and men in response to trauma. This term seems to describe a single syndrome which is most strikingly paraphrased as "peripheral circulatory failure," or even better a "systemic arterial hypotension."

Relevance

As the study of trauma and its relations to shock become more and more widely undertaken, the relevance of the laboratory animal to the human patient in shock can be sharply questioned. Certainly in man several syndromes are observed which might fit the clinical picture of shock, yet their etiologies differ and their reversibility is variable, but sometimes is accomplished with a minimum of effort. Thus, the

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vasovagal syndrome or faint (Sequestration hypotension) characterized by profound pallor, sweating, low blood pressure, slow pulse, nausea and sometimes loss of consciousness is usually transient and disappears spontaneously when the patient is supine. Somewhat less regularly reversible is the peripheral circulatory change seen upon vigorous manipulation in the upper abdomen at operation which results too in a fall in blood pressure and either a slowing or increase in pulse rate.

While the clinical picture of shock following many forms of injury is a complex one, the fundamental or initiating abnormality is a circulating blood volume which is too small to fill the arterial tree in a normal manner and to perfuse important capillary beds effectively. In shock due to severe wounding or hemorrhage this results from loss of whole blood or plasma or both from the circulation. In other types of shock the blood volume may not be lost from the body, but may be shifted from the arterial to the venous side of the circulation. In all types there is decrease in cardiac output and changes in venomotor tone.

Deficient Methods

One of the great deficiencies in studying hemorrhagic or traumatic shock in man and in animals lies in the deficient methods of measuring accurately the blood volume as it circulates in the vascular tree. The limitations and value of the hematocrit in estimating blood loss have been emphasized repeatedly. Moore has shown that after the rapid loss of 20-30 per cent of the blood volume (1000-1500 cc.), the hematocrit falls slowly and progressively over the succeeding 24 to 36 hours, stabilizing then with a total blood volume depleted by approximately 15 per cent; with smaller losses (10-15 per cent) the hematocrit stabilizes within eight-24 hours. Following hemorrhage, venous oxygen saturation is elevated as is the blood lactate level. These findings are interpreted as reflecting tissue anoxia associated with arterio-venous shunts. After a period of three to four hours, mild acidosis develops with a lowered Ph level. Concomitantly, the cardiac output is low and there is an increased arterio-venous carbon dioxide difference, suggesting again slow or poor tissue perfusion.

Dynamic Equilibrium

Since a fall in circulating blood volume is the factor common to shock of all etiologies it is well to recall that the blood in circulation is in a stage of "dynamic equilibrium." There are constant additions and withdrawals of water, electrolyte and many nonelectrolytes, and in health these movements balance one another to maintain a constant blood volume. Serum proteins escape slowly but are replaced from lymph and protein stores; new blood cells are being added constantly as the older cells are destroyed. In the presence of hemorrhage, traumatic shock, infection, crush injuries, cold, this balance is upset remarkably and the blood volume is variably altered. Determinations of plasma volume and red cell mass can be done but there are serious problems in their interpretations. Not the least of these difficulties is the observation that the longer from the time of blood loss to transfusion institution, the greater will be the volume of transfused blood necessary to restore blood volume. Prentice, in his study on the wounded of the Korean War, described the remarkably large volumes of blood given to these combatants. Despite the fact that as much as 10,000 ml. were given to some patients there was a "static deficit" of about 15 per cent of the estimated normal blood volume (or more) after resuscitation. In the extensively wounded patient this lost blood may reside in tissue planes and areolar areas extending over large areas about the wound and up and down the trunk.

It would appear then that the simple measurements of hematocrit and hemoglobin levels may have serious limiting value in the seriously injured patient and that this defect may increase with time between injury and the beginning of resuscitation. An example of these difficulties is seen in the following case history.

> M. S., a 38-year-old colored man was admitted to University Hospital following an auto accident in which he received a fractured sternum, laceration of the left ventricle and right atrium, laceration of left lung hilum, bilateral pneumothorax. After resuscitation the heart lacerations were closed, the left lung was removed and the chest wall and sternum reconstructed. In the first 24 hours and throughout the operation 15,000 ml. of whole blood, 3000 cc. of Dextrose in water plus 300 cc. of an osmotic diuretic were given. Blood volumes done on two occasions after operation showed a total deficit of 1200 and 2000 ml. Yet the hematocrit after operation was never below normal and hemoglobin determinations varied between 12.6 gms and 18.7 gms. Following operation there was a steadily increasing serum water concentration and a falling serum specific gravity. Total serum proteins varied between 4.7 gms. per cent, just before death, and 6.7 gms. per cent, at the completion of the operation. (Figures 1 and 2).

In this patient, then, there appears a normal hematocrit despite a diminished blood volume and increasing hemodilution. This can occur only in in-

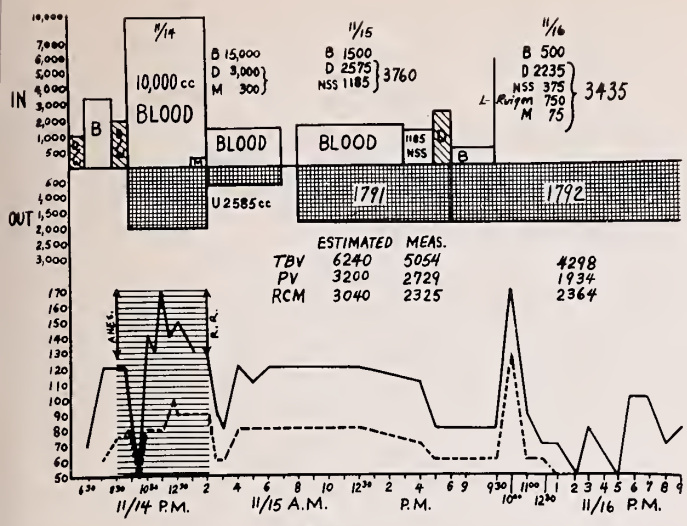

Figure 1

Therapeutic failure following trauma, acute massive blood loss and repair.

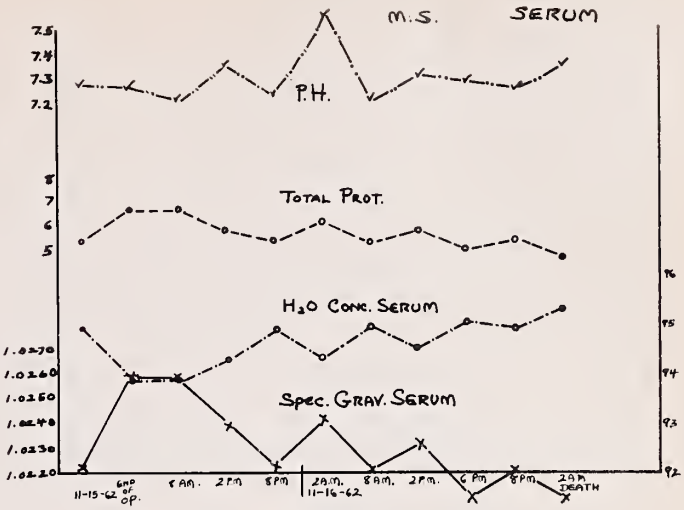

Figure 2

Post-trauma progressive, uncorrected hemodilution.

stances in which there is sudden alteration in osmolality of serum with change in red cell size. Hemoglobin determinations reflect in some degree the plasma hemoglobin level which reached 31.07 gms. per cent shortly before death.

In summary, this is an example of a patient who suffered severe and extensive trauma and who failed to survive. He responded well to initial resuscitation and operation. His subsequent course was characterized by:

1) Normal measured hemoglobin and hematocrit levels.
2) Continuously increasing hemodilution.
3) Continuously falling serum specific gravity.
4) Increased plasma hemoglobin levels.
5) Relatively normal blood Ph.
6) A repeatedly diminished blood volume despite the remarkably large volumes of blood transfused.

This patient represents, then, an individual in which some but not all of the available data were evaluated, and the treatment, predicated upon incomplete data was insufficient to preserve life.

Additional data show the usual pattern following injury, a fall in serum sodium, a rise in serum potassium and terminally a rise in both constituents.

Initiating Feature

While it is true that the clinical picture of shock has as its initiating feature a reduction in blood volume and a fall in blood pressure, the patient who is to recover from shock must first have an environment in his capillary bed which will permit the nutrition of tissue cells and a flow of fluid which will carry away tissue metabolites. One of the factors necessary for capillary perfusion is an adequate arterial blood pressure.

Recently, Hardaway has postulated that reversible shock may result from a decreased cardiac output due to a) hypovolemia and reduced venous return to the heart and, b) normovolemia with reduced venous return secondary to intravascular capillary coagulation or clotting. He concludes that irreversible shock of both hypovolemic and normovolemic types may result from focal tissue necrosis in many areas of the body secondary to the interruption of blood flow by these intravascular thrombi.

These changes in peripheral blood vessels are explained by the presence of arteriolar spasm, the formation of capillary thrombi which in turn promote further vascular spasm. Blood drawn at this time is at first hypercoagulable due to the activation of endogenous heparin and sometimes fibrinolysin. In experimental animals this clotting results in a fall in fibrinogen, prothrombin and platelets, and Factor V and VII. Endogenous heparin and fibrinolysin release are the bodies response to cause a halt and reverse this clotting process.

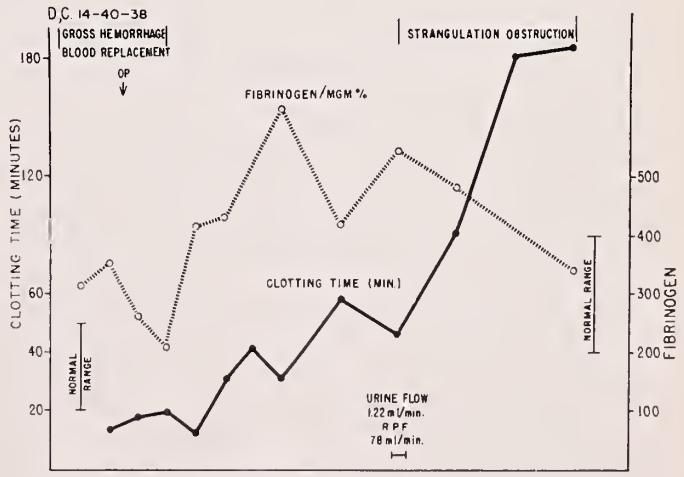

Figure 3

Fibrinogen levels and clotting time following two episodes of lethal hypovolemic shock.

Shock due to hemorrhage in man shows usually a low normal or mildly shortened clotting time but fibrinogen levels are frequently within normal range or fail to follow regularly fluctuations in clotting time. In part the initial fluctuations are likely related to the amount of blood shed and when this has occurred at a rapid rate with large loss, tends to be reduced. To date, in the several patients studied, abnormal fibrinolysins have not been looked for carefully and unusual bleeding has not occurred. On the other hand, terminal prolongation of the clotting time resulting probably from cell death has been a frequently noted occurrence.

In the human, studies on clotting and fibrinogen levels are difficult to interpret since, unlike those in the experimental animal, constant efforts are being made to resuscitate and support the patient. With the use of hypothermia and the administration of whole blood, plasma, plasma expanders and large volumes of glucose and electrolyte solutions, the effects of dilution and repletion are changing constantly.

In these studies upon humans, no sure or constant pattern is visible except that, in the patient who survives his injury, there is regular reversal of clotting and fibrinogen levels to normal.

It seems reasonable to summarize our observations to date by saying that, except in special instances, the frequently seen areas of focal necrosis in gut, liver, kidney, cardiac muscle, as a result of intravascular thrombi in experimental animals, are not regularly seen in humans who have died in shock, and certainly identifiable focal areas of overt necrosis are not seen.

Environment

Despite this evidence there remains the certainty that it is the environment of the capillary bed which permits survival or death of tissue cells, and in turn survival or death of the individual.

We have studied in animals the changes at the other end of this spectrum, in peripheral tissues, by determining the changes in cellular enzyme systems after hemorrhagic and traumatic shock. These studies have shown: 1) a decreased oxygen uptake in brain and liver tissues; 2) increased glycolysis with a decrease in dehydrogenases; 3) a significant increase in DPN/DPNH ratios; and changes in the distribution of dehydrogenases between mitochondria and cellular cytoplasm and serum. This migration of enzymes is associated with a reduced activity of the enzyme and as a consequence increase in lactic acid and in pyruvate/lactate ratio. The only way for the three carbons of lactic acid to return to the main stream of metabolic events is by re-oxidation to pyruvic acid by way of DPN dependent lactic dehydrogenase and this route requires the effective re-oxidation of DPNH which does not occur in irreversible shock as produced in these animals.

Oxygen

Recognizing that these changes in peripheral cell masses resulted largely from hypoxia, the most logical and direct form of treatment was with hyperbaric oxygen. Considerable information is available upon the use of high atmospheric pressures from observations upon caisson and tunnel workers and upon Navy diving personnel. In these studies, however, only *air* was used. When oxygen is used many new and difficult problems arise.

Impressive Oxygenation

One hundred per cent oxygen administered under hyperbaric conditions produces impressive oxygenation. When oxygen is administered to healthy individuals at normal pressure, the hemoglobin, normally about 97 per cent saturated with oxygen, becomes fully saturated. In addition, more oxygen becomes physically dissolved in blood. An increase in the ambient pressure while breathing oxygen increases aveolor oxygen and the amount of physically dissolved oxygen increases at the rate of two volumes per cent per atmosphere. An ambient pressure of three atmospheres could yield an arterial Po_2 of over 2000 mm. Hg. and an increase of about six volumes per cent in arterial oxygen content above the normal level. Since most tissues of the body do not extract more than six volumes per cent from the blood passing through them, this addition would meet tissue needs without calling upon the oxygen carried by hemoglobin.

Circulation of Blood

When looked upon from this viewpoint, the suggestion arises whether under such circumstances one needs to have blood circulating in blood vessels—perhaps glucose, saline or some other fluid would suffice. Of course, this is not so. Some tissues, for example the heart, extract normally more than 12 volumes per cent of oxygen from the blood. In some tissues oxygen in high concentration produces adverse effects—oxygen poisoning may occur. Perhaps most importantly Co_2 and other tissue metabolites must be removed and these require blood.

Therapy Deficiencies

Thus, the use of this form of therapy might seem to have many deficiencies and its use somewhat illogical in that if the peripheral circulation is suf-

ficiently impaired by capillary coagulation and clotting and if the volume of circulating fluid is reduced much below that needed to fill the vascular bed, then the addition of oxygen in physical solution in blood would appear fruitless.

Nonetheless, there comes to mind many instances where this form of therapy may have obvious logical application—carbon monoxide poisoning, coronary occlusion, cerebrovascular accidents, gas bacillus infections—and, indeed, some clinical experience confirms these theoretical expectations. Recently, in our laboratories, experimental animals in prolonged shock from blood withdrawal had a mortality rate of 83 per cent. A second group of animals in whom vascular collapse was produced in a likemanner, but then treated with oxygen under three atmospheres of pressure, the mortality rate dropped to 26 per cent. Similar findings have occurred in traumatic shock produced in rats by tumbling. Whether or not OHP will be of similar value in man remains to be seen.

Clinical Studies

More recently in order to study more fully the pathophysiologic changes in the peripheral tissues when perfusion with blood has been curtailed for a prolonged period, clinical studies upon human models have been undertaken. The model chosen was the peripheral tissues (the lower extremities of man) following aortic occlusion for the repair of abdominal aortic aneurysms. These studies are represented in Figure 4. Here is seen acidosis, the shunting of blood around the capillary bed—high venous oxygen after recirculation is begun—and the change in lactic acid and lactic and pyruvate ratios. These changes have been well documented in the shocked patient. It is assumed that with stagnant anoxia, sludging and vasospasm in the vessels of the extremity, these changes are reversed only slowly. By the use of dextran, both as a plasma expander, but more importantly as a dispersing, anti-sludging agent, these findings are reversed rapidly and a trend towards normalcy expedited.

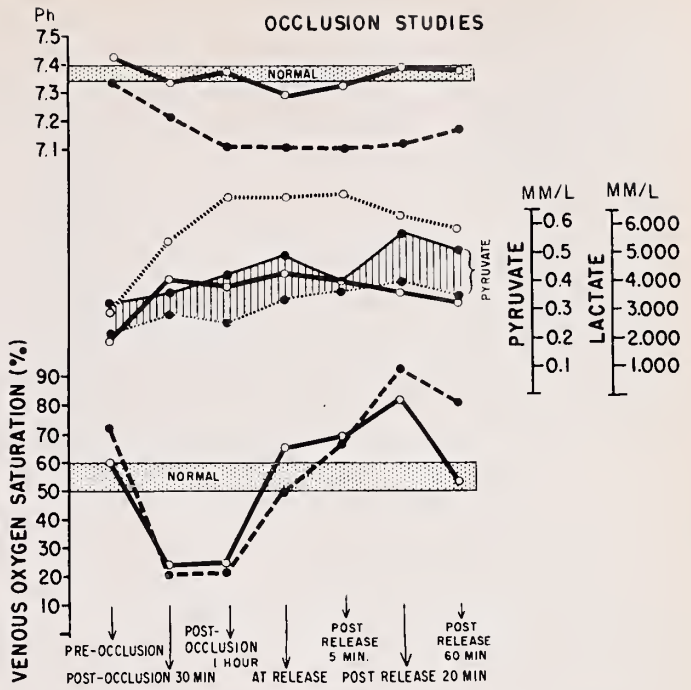

Figure 4

P h	o—o Dextran treated o—o D/W	Lactate	o—o Dextran treated o—o D/W
Pyruvate	o—o D/W o—o Dextran treated	Venous oxygen	o—o Dextran treated o—o D/W

Summary

We believe then that there is already beginning to emerge information which is logical and encouraging in the treatment of shock.

a) Knowledge of the volume of circulating blood present in vessels is important. This cannot be determined with sufficient accuracy by hemoglobin and hematocrit determinations. These must be supplemented by measurements of both red cell and plasma volume concentrations and measurement of plasma hemoglobin concentrations.

b) The quality of the circulating fluid must be determined. This may be accomplished through knowledge of the specific gravity and water concentration of serum.

c) Based upon these observations, capillary sludging and coagulation seem most safely combated with dextran. Tissue perfusion will thereby be enhanced.

d) The oxygen carrying capacity, and thereby the peripheral tissue perfusion effectiveness, may be enhanced remarkably by the administration of oxygen at several atmospheres of pressure. When hemodilution has become extreme this may be the only suitable means of enhancing sufficiently the transport of oxygen from the aveolus to its ultimate destination in the mitochondrion.

University of Maryland
School of Medicine

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THE TREATMENT OF FACIAL FRACTURES

Carl R. Hartrampf, Jr., M.D., *Atlanta*

■ ***Techniques of reduction and fixation of eight common facial fractures are described.***

PAST LITERATURE on the subject of facial fractures is replete with detailed descriptions of complicated gadgetry used in reduction and fixation. The carry-over of these antique reduction methods and the "Rube Goldberg" fixation apparatus has served to generally confuse one who would want to equip himself to handle such problems. There need not be this confusion, especially in view of the fact that the facial skeleton lends itself very nicely to exact reduction as one would replace the parts of a puzzle. It is not the purpose of this presentation to repeat the classification of fractures, nor to describe any new techniques. Yet, it is the aim to provide a simple, concise method of reduction and fixation for the most commn fractures of the facial skeleton. It is fully appreciated that some perfectly adequate methods will not be described and that some of the more complicated problems will not be discussed.

General Management

Facial fractures per se are not a surgical emergency, and endanger life only when one overlooks a concomitant injury such as a crushed chest, a ruptured abdominal viscus, or an intracranial injury. There are actually two situations that need prompt attention in conjunction with facial fractures. One is the grave danger of airway obstruction with comminuted maxillary fractures and fractures of the mandible with loss of central mandibular support. Never should one procrastinate in the performance of a tracheostomy in this situation. Asphixiation from partial upper airway obstruction may be quiet and often unsuspected. The other emergency in facial wounds is exposure of the cornea from partial avulsion of the lid. Often less than 30 minutes of exposure is all that is needed to cause permanent corneal damage.

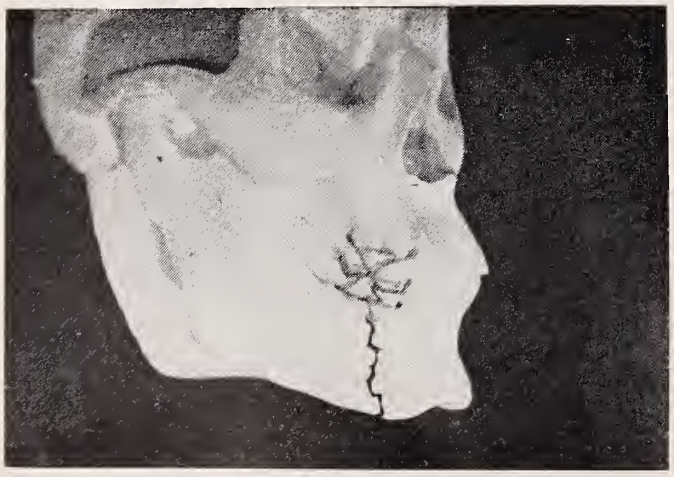

Figure 1

Presented at the 109th Annual Session of the Medical Association of Georgia, May 7, 1963, Jekyll Island, Georgia.

Diagnosis

It is unwise to subject a seriously injured patient to hours on the X-ray table trying to get perfect facial films. The combination of an uncooperative patient and a sleepy technician usually produce a poor X-ray that must be repeated for an interpretation. The ancient arts of inspection and palpation will give an accurate assessment of the extent of facial skeletal injury. The diagnosis can be confirmed by X-ray at a more opportune time.

Mandibular Fractures

In the treatment of mandibular and maxillary fractures, normal occlusion of the teeth along with a symmetrical external contour is the desired end result. If the patient is blessed with a normal complement of teeth and these teeth are repositioned in their natural occlusal alignment, the fractures usually follow suit. The various types of mandibular fractures and the available teeth dictate the method of maintaining occlusion.

Simple Undisplaced Fractures

The majority of mandibular fractures can be managed by simple intermaxillary wiring (Figure 1). This type of fixation is adequate for most undisplaced fractures, or fractures that can be repositioned with little effort. The basic principles of intermaxillary wiring are: 1. Local anesthesia may be used when occlusion is possible without undue pain to the patient. If general anesthesia is necessary, the actual wiring of the two jaws together is postponed until the patient is fully awake. 2. Wires should be

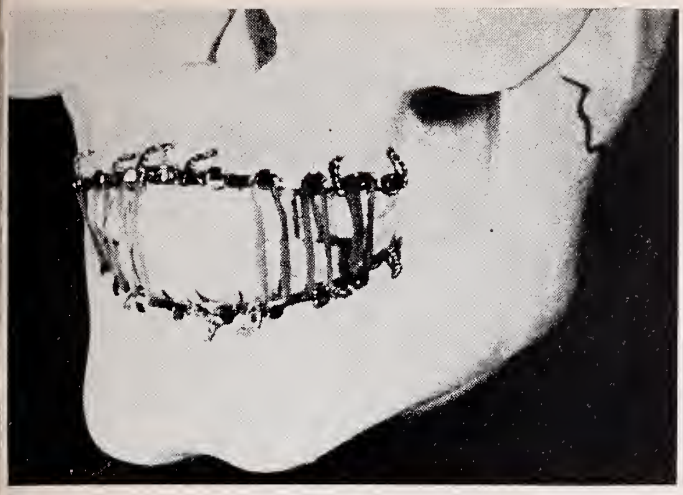

Figure 2

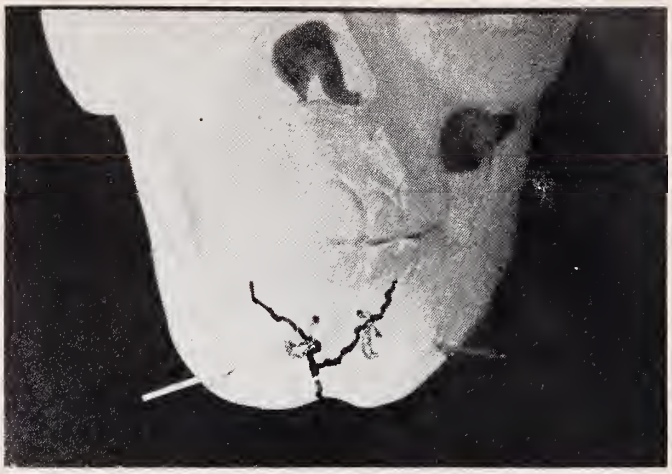

Figure 3

placed around solid teeth. Preference is given to premolars, molars canines, incisors, in that order. A soft #26 stainless steel wire is seated well around the neck of the tooth, and twisted in a clock-wise direction to a final spiral. Two upper and lower teeth on each side usually suffice. Additional support may be needed where fracture lines extend between two teeth, or where an occasional tooth is missing. 3. Immobilization is maintained for from four to six weeks, and during this period of time, both nutrition and oral hygiene are important. 4. After the wires are removed, the patient is instructed in mouth-opening exercises and heavy chewing is avoided for another two weeks. Teeth extractions and jaw manipulations are avoided for an additional period of time.

Simple Fractures with Poor Teeth

In the patient with poor teeth, but enough strategically placed teeth to act as anchors, simple archbar fixation can be applied. It is important that every available tooth be used for fixation and that the wire ends be turned under in such a way as to prevent irritation of the oral mucosa.

Simple Fractures with Painful Reduction

The open bite deformity is often the only clue to condylar neck fractures. In this situation, reduction to perfect occlusion is very painful. A simple solution is archbar fixation with the application of gentle elastic traction to bring the teeth into normal occlusion. (Figure 2). After occlusion has been obtained, the rubber bands are replaced with wire for immoblization. This same principle may be used in other fractures where occlusion is not possible immediately. However, care should be taken to avoid pulling against an impossible situation such as interlocking fragments or soft tissue between fragments.

Difficult Reduction, Unacceptable External Contour

When open reduction is necessary, a submandibular incision gives adequate exposure. One should keep in mind the course of the mandibular branch of the facial nerve and avoid this nerve in the incision. The fracture site can be completely exposed and then reduced under direct vision. Small holes drilled in the fragments are connected with crossing #24 stainless steel wire to assure firm fixation. To give another point of fixation, use either intermaxillary wiring or archbar fixation. Stability is a problem in fractures of the mandibular symphysis. The combination of direct wiring and internal pins (Figure 3) or internal pins and intermaxillary wiring provides a firm union.

Edentulous Mandible

The edentulous mandible presents some problems in fixation. However, these problems can usually be overcome in every situation except the condylar fractures. If an attempt is made to reduce and fix the condylar fractures, the results are often disappointing and complications such as facial nerve paralysis are frequent. A satisfactory solution is the application of a Barton bandage for about two weeks followed by gentle mouth-opening exercises. Fractures of the body and ramus can be fixed either by direct exposure and small wire fixation or by closed reduction and internal Kirschner wire fixation. The edentulous posterior fragment has been a problem in the past. The masseter muscle continues to pull this fragment superiorly and without proper fixation, malfunction results. Open fixation is difficult. This fragment can be held very nicely with a Kirschner wire, passed in either direction (Figure 4).

Central Face Fractures

On first thought, one may compare the breaking of the facial skeleton with the cracking of an eggshell. However, unlike the eggshell, the facial bones are bound together by relatively weak junctures, and the breaks usually occur along these predictable lines. For that reason, accurate diagnosis of the

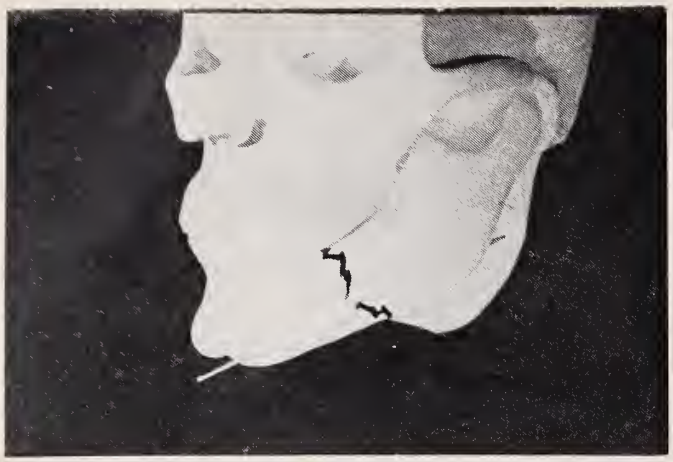

Figure 4

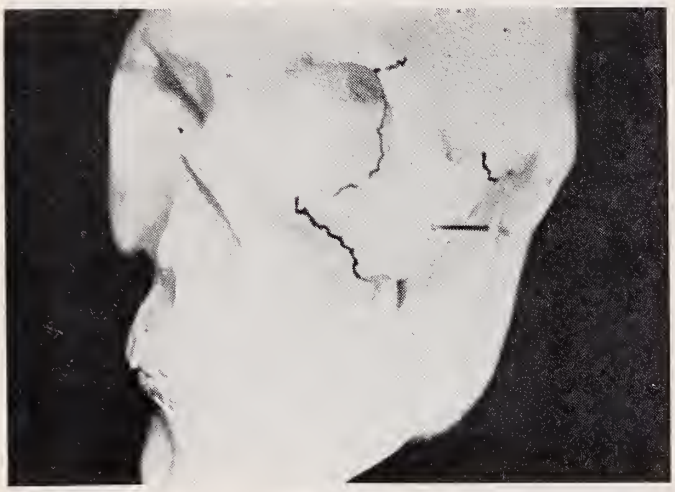

Figure 5

fracture site can be made leading to exact reduction and fixation. Complicated head caps and external traction apparatus have no place in the present day management of central face fractures.

Zygomatic Fractures

The zygomatic bone often gives way to a direct blow to the cheek. This fracture is often missed due to obliteration of the defect by local facial edema. However, if left uncorrected, a depression of that side of the face will result along with widening of the orbit and diplopia. Early diagnosis is made by palpating a defect in the zygomaticomaxillary and the zygomaticofrontal junctures. Other clues include diplopia, anesthesia of the ipsilateral upper lip, and X-ray findings. Correction is made easy and accurate by the direct application of a jaw hook under the zygomatic arch. Steady traction on this hook will produce a perfect reduction as judged by palpating the orbital borders. If the fragments do not lock in perfect reduction, fixation with a transfacial Kirschner wire is necessary (Figure 5). The Kirschner wire is removed in two weeks.

Orbital Fractures

Orbital floor fractures (blow out fractures) should

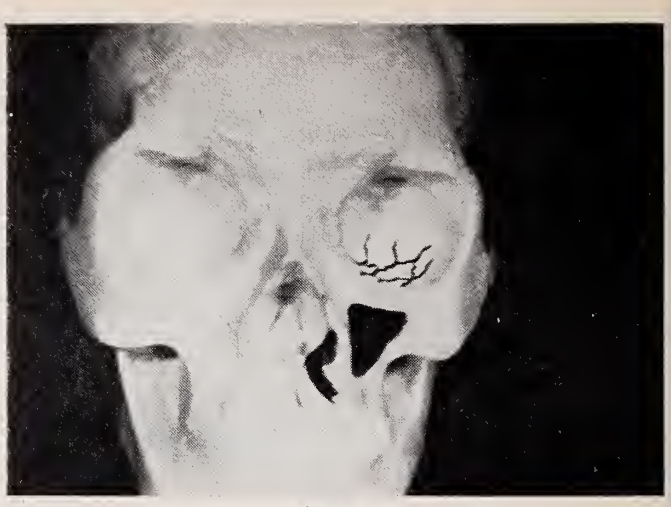

Figure 6

be suspected after any direct blow to the orbit. If this fracture is missed, the residual defect is an unsightly enophthalmos. If X-rays including laminagrams, present some question of blow out, direct exploration of the orbital floor is indicated. Through a direct approach, the orbital fat is returned from the antrum to the orbital cavity and the fragments of bone are held in the elevated position with an antral pack (Figure 6). If fragments of bone are missing or comminution is too severe, a thin iliac bone graft can be inserted as a plate between the fat and the antrum. Secondary correction of the depressed eye can be done, but the results are not as satisfactory as if the problem had been handled immediately. Orbital rim fractures are reduced under direct vision and fixed by individual wiring (Figure 7).

Craniofacial dysjuncture

This fracture is often accompanied by intracranial injury and correction may have to await resolution of the neurological problem. Tentative diagnosis can be made by moving the upper arch while the cranium is held motionless. Periorbital ecchymosis and edema of the eyes is another clue. Individuals with this fracture should be carefully checked for cerebrospinal rhinorrhea, and if found, antibiotics are indicated until the dural leak stops or is surgically closed.

Fixation is started from one stable point, either the mandible or the cranium, and the fragments are then joined to each other building one stable unit. In the more complicated fractures, one may use a combination of individual wiring, internal pinning and archbar fixation (Figure 8). Adequate exposure of the fracture site is all-important for exact reapproximation and firm fixation. The so-called "hidden" incisions about the orbital rims afford access to the frontozygomatic and maxillozygomatic separations. And adequate exposure of the maxilla is obtained via the anterior superior dental sulcus. With

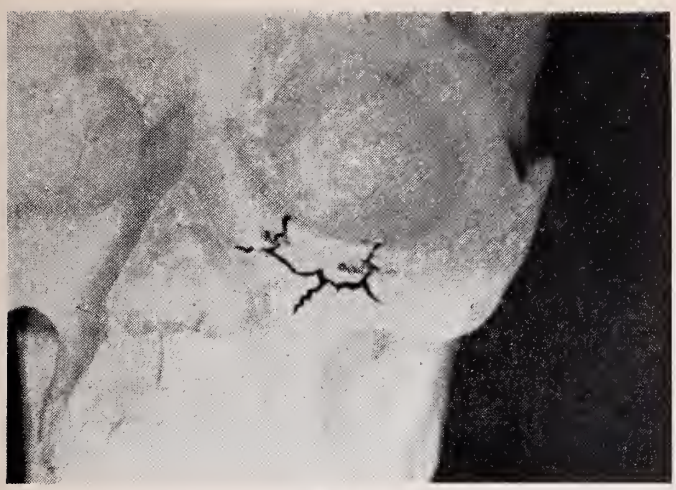

Figure 7

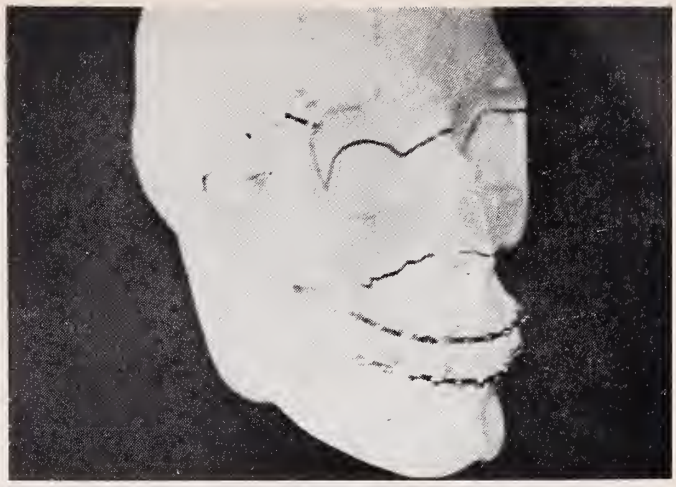

Figure 8

adequate fixation, healing is very rapid and secondary work minimal.

Summary

In the correction of facial fractures, established surgical principles have replaced the more complicated, ineffective gadgetry used in the past.

Techniques of exact reduction and simple fixation for the more common facial fractures have been described.

1938 Peachtree Road, N.W.

1964 CALENDAR OF MEETINGS

State

February 9—Seminar on "Georgia's Mental Health Program — What Can We Do Now?" sponsored by the Mental Health Committees of MAG and WAMAG, Milledgeville State Hospital, Milledgeville.

February 10-14—"Hypertension and Its Complications" sponsored by the Department of Continuing Education, The Medical College of Georgia, Augusta.

February 17-19—Atlanta Graduate Medical Assembly, Atlanta Biltmore Hotel, Atlanta.

February 18-20—"Obstetric Problems in Private Practice" sponsored by the Department of Continuing Education, The Medical College of Georgia, Augusta.

March 18-20—"Three Days of Advanced Electrocardiography and Vectorcardiography." Postgraduate course sponsored by the Department of Medicine, Emory University School of Medicine, Atlanta.

March 19-21—Annual Meeting of the Georgia Society of Ophthalmology and Otolaryngology, Callaway Gardens, Pine Mountain, Ga.

May 3-6—110th Annual Session of the Medical Association of Georgia, Macon, Ga.

Regional

January 27-29—American College of Surgeons, Lord Baltimore Hotel, Baltimore, Md.

January 30-31—Symposium on "Scintiscanning in Clinical Medicine," sponsored by the Department of Radiology, Bowman Gray School of Medicine, Winston-Salem, N. C.

February 12-16—American College of Cardiology, Roosevelt Hotel, New Orleans, La.

February 29-March 5—International Academy of Proctology, Deauville Hotel, Miami Beach, Fla.

February 29-March 6—American College of Allergists, Americana Hotel, Bal Harbour, Fla.

March 1-6—American College of Allergists Graduate Instructional Course and 20th Annual Congress, The Americana, Bal Harbour, Miami Beach, Fla.

March 2-5—New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans, La.

March—Postgraduate Courses sponsored by the Department of Continuing Education of the University of Tennessee Medical Units: March 9-13—"Radiology;" March 19-21—"Surgery of the Hand;" March 25-27—"Obstetrics and Gynecology."

March 16-19—American College of Surgeons (sectional meeting for surgeons and graduate nurses), Roosevelt and Jung Hotels, New Orleans, La.

March 21-28—Southeastern Surgical Congress, held aboard the S.S. Hanseatic. Cruise will begin March 21, sailing from Ft. Lauderdale, Fla. and returning to the same port on March 28. Stops to include St. Thomas, San Juan and Nassau.

April 1-3—American Surgical Association, The Homestead, Hot Springs, Va.

April 13-16—American Radium Society, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 15-18—West Virginia Academy of Ophthalmology and Otolaryngology, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 27-28—Society of Head and Neck Surgeons, Peabody Hotel, Memphis, Tenn.

May 21-23—Eighth Biennial Cardiovascular Seminar sponsored by the Heart Association of Greater Miami, Carillon Hotel, Miami Beach, Fla.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, Calif.

January 6-March 14—Ten week Postgraduate course in Tropical Health sponsored by the Stanford University School of Medicine, Stanford Medical Center, Calif.

January 12-18, 1964—Tenth Annual General Practice Review, sponsored by the University of Colorado School of Medicine, Denver, Colo.

March 16-28—Postgraduate Course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine.

April 11-16—American Academy of General Practice, Convention Hall, Atlantic City, N.J.

ON BONE MARROW GRAFTING IN MAN

Alexander H. Woods, M.D., *Oklahoma City, Oklahoma*

■ ***Because of its marked sensitivity to radiation or chemotherapy, it is highly desirable to find a method of protecting or repairing an injured marrow.***

THERE ARE MANY theoretical reasons why successful bone marrow homografting* in man would be desirable. Of these, three have emerged as the basic motivating forces for the large volume of experimental work now going on.

First, since bone marrow is the normal tissue most sensitive to the effects of either chemotherapy or ionizing radiation, it would be desirable to find a way of protecting or repairing it which would allow much greater doses of these agents to be used. Marrow grafts seem to offer a practicable way of achieving this.

Second, the repair of extensive marrow damage secondary to acute exposure to radition, such as might occur in nuclear reactor accidents or in exposure to radiation belts in space travel, present much the same problem.

Third, one of the current approaches to homografting of other organs and tissues requires preparation of the recipient by effectively knocking out his own immunological apparatus. This, again, is most conveniently done by lethal or near lethal doses of radiation. Bone marrow protection in this case would logically come from bone marrow grafts taken from the same individual donating the other tissue to be grafted, kidney, for example. In this way, a degree of tolerance to the donor's cells may be built up by the protective bone marrow graft which would pave the way for the homologous kidney.

**homograft = a graft between two unrelated individuals of the same species; isograft = between two individuals of identical genotype, i.e., identical twins; heterograft = between two individuals of different species. The word "homograft" is now being replaced by "allograft"; however, the older terminology will be used here.*

Presented at the 109th Annual Session of the Medical Association of Georgia, May 5, 1963, Jekyll Island, Georgia.

Unfortunately, each one of these three objectives has its own peculiarities, too complex to investigate here. They all resolve down to the same basic problem, however, which can be stated in two parts: what are the mechanics of protection by bone marrow grafts, and what are the immunological problems involved. I shall restrict myself here to a consideration of these two fundamental aspects.

Mechanics of Protection

The birth of modern homografting efforts can conveniently be dated from the observations of Jacobson[1] that rodents could be protected from lethal doses of X-irradiation by shielding their exteriorized spleens in lead during the exposure. When it was further discovered that the shielded spleen could be removed an hour after radiation with no loss of the protective effect, Jacobson[2] was led to postulate the release of a humoral factor from the spleen; the time interval seemed much too short to allow for a migration of primitive cells from the spleen into the bone marrow in sufficient numbers to provide a nidus for repopulation. Later evidence, however, has all pointed toward the latter explanation. By the use of chromosomal[3] or biochemical[4] markers, it has been possible to demonstrate that an actual repopulation by graft cells does occur in homografts or heterografts. Where autografts or isografts are used, no such markers are available to prove a similar mechanism, but the analogy seems clear. It should be emphasized, nevertheless, that the concept of a humoral factor is far from dead. Sporadic reports of protection against radiation by cell-free extracts of bone marrow and other tissues continue to appear.

The next question is which exact cell type is responsible for cellular repopulation. This is not an academic question. When a patient is prepared for a graft, and when this graft is being depended upon for protection against an otherwise lethal treatment schedule, the therapist is entitled to ask rather searching questions about how good the graft really is. The accepted approach is to count the number of nucleated cells available in the graft. When this number exceeds about five billion, the quantity is felt to be sufficient; when it is below one to two billion, it is probably not sufficient.[5] This is a rather gross approach which neglects any consideration of cell type. Most hematologists would subscribe to the notion that the primitive stem cell of the bone marrow is the only truly totipotential cell there, and that the success or failure of a marrow graft will depend most closely upon its content of stem cells. This is supported by some of our own results shown in Table I. Two patients were given single massive doses of nitrogen mustard, protection being afforded by marrow autografts. One patient did well (Number 6) with autograft totalling two billion nucleated cells; the other (Number 7) did very poorly and died with an aplastic marrow despite a graft of over four billion cells. The essential difference between these two patients is in the stem cell content of their grafts—Number Six received 178 million and Number Seven only 21 million. Although we can never be sure in such an experiment, the importance of the stem cell seems real. As a result of this we are now inclined to grade graft potential more by stem cell content than by total nucleated count.

TABLE I

ABSOLUTE COUNTS ON BONE MARROW ASPIRATES ($\times 10^6$)

Cell Type	Patient No. 6	Patient No. 7
Stem Cells	178	21
Myeloblasts	40	124
Promyelocytes	80	290
Myelocytes	160	250
Metamyelocytes	435	830
Adult Granulocytes	500	1,740
Normoblasts	475	775
Lymphocytes	40	84
Eosinophils	80	42
Plasma Cells	0	0
Total Nucleated Cells	1,980	4,150

Mechanical Details

There are other mechanical details of marrow grafting which include such things as route of administration, type of filtering required, and preservation of the graft over prolonged periods (tissue banking). These problems are pretty well resolved at present, far better, at least, than are those surrounding the immunological barriers to homografting.

It is a bare ten years since we have had experimental proof that the rejection of homografts is, in fact, immunological. The type of reaction is bizarre, resembling most closely the tuberculin reaction among more familiar immunological processes. The circulating antibody of the gamma globulin type does not seem implicated in the rejection of grafts except where the donor and recipient are from widely disparate species. But the reaction is definitely immunological. It has the two primary attributes of an immune reaction: specificity and a learning effect manifested by an accelerated reaction upon second exposure to the same antigen.

The specificity is truly marvelous and is keyed to the genotype of the donor. The second-set phenomenon, or accelerated rejection upon second exposure, occurs only with grafts taken from the same donor. A rabbit given consecutive skin grafts from different donors will react to each in a primary manner, i.e., as if no previous exposure had been experienced. This means the antigens responsible for homograft immunization are highly individual, much as are the antigens of the blood groups. They are also under close genetic control which has made them susceptible to study in inbred strains of mice. Snell[6] and others at the Jackson Laboratory in Bar Harbor have done extensive work along these lines. They have categorized at least 15 genetic loci which control histocompatibility factors. One of these, the H-2 locus, is very strong and possesses at least 20 different alleles. From studies in about 60 inbred mouse strains, it is clear that random matings among them could produce literally thousands of different combinations, successful grafts between which would be impossible or unlikely. Carrying this work over to man illustrates the great statistical improbability of finding a random pair of individuals compatible with each other.

Typing

The next question arising from this genetic study regards the possibility of typing for any or all of these antigens. Can human beings be grouped for histocompatibility factors much as they are for blood types? The chief problems here have been, first, the finding that histocompatibility antigens do not appear on the red cells except in a few cases and, second, that the chemical nature and tissue distribution of these antigens is still largely unknown. It is difficult to type for something when you do not know where to look for it. In addition, it seems likely that the number of such antigens which would have to be typed, if one did know where to look, would be numbered in the hundreds, a job which could make even a hardened blood bank technician blanch.

The principal fruit of all this work has been to force those who wish to use homografts clinically to accept the fact that they will either have to use subjects in which no immunological disparity between donor and recipient exists, i.e., identical twins or inbred strains of animals, or go ahead and deliberately try to make grafts take across known incompatibility barriers. Experiments in man, therefore, have taken three forms:

a) Autografts, in which the subject's own marrow is removed and stored during exposure to an injurious agent. This is the purest form of bone marrow grafting, and the one which has been used in our laboratory and others to explore some of the mechanical factors of marrow grafting.

b) Isografting, in which marrow from an identical twin is available.

c) Homografting, where admitted immunological barriers exist and attempts to overcome them must be made.

Of these three approaches, the first two should fail only for technical reasons—too small a graft, too few stem cells, faulty storage, etc. The third could fail for all these reasons plus immunological barriers. It has, in addition, the potential danger of the delayed bone marrow reaction which follows successful homografts and which is itself often lethal.

Chief Threat

The delayed bone marrow reaction is worth spending some time upon since it is the chief threat to marrow homografts, and a big one. It was first encountered during attempts to protect rodents against varying doses of X-radiation. Table II, adapted from Makinodan[7] and elsewhere, illustrates what happens when marrow homografts or heterografts are used for protection. From this work emerges the fact that a marrow graft which may be lifesaving in a lethally irradiated animal may itself be lethal in a sublethally irradiated one. The explanation is this. Administration of foreign marrow to a normal animal results in an immune reaction and rejection, generally at no cost to the recipient who is easily able to overwhelm the foreign cells by sheer weight or numbers. When the recipient's immunologic potential is weakened but not abolished by sublethal X-ray, the struggle between foreign and native cells is more even. Both suffer and the net effect is to increase mortality from the X-ray.

When the recipient's immunologic potential is completely abolished by lethal X-ray, the foreign cells meet no opposition. They proliferate, repopulate the recipient's devastated marrow spaces and are life saving. Yet, as a logical extension of this, we know that the foreign bone marrow itself contains immunologically competent cells. As the graft expands, these cells attain greater force and the point is reached at which they react against their new host. The end result is destruction of the host. This takes place several weeks following grafting and is known as the delayed marrow reaction.

Varying Severity

Delayed marrow reactions are almost the rule in grafted mice. In man, they are of varying severity but may be pronounced[8]. They make it clear that homografts of bone marrow made across histocompatibility barriers require prior preparation of both recipient and marrow graft. Obviously, irradiation of the graft would destroy both its immunological and protective capacities and another recourse must be found. The one at present under close examination is the use of fetal marrow as donor material. Fetal material has the theoretical capability of adjusting to a foreign environment without an immune reaction, a phenomenon first described by Medawar[9] and called by him acquired neonatal tolerance. Insufficient work has been done with fetal tissue to elucidate its value fully; however, preliminary results indicate that the delayed marrow reaction may be partially avoided, although somewhat larger grafts are required. From this it is clear that any situation in which the use of a marrow homograft is being considered must be analyzed with great caution. Let us take the example of the patient exposed to a large amount of whole body radiation, a situation faced by Mathé[10] and Congdon[11] after nuclear reactor accidents. A decision must be reached as to whether the patient has received a lethal dose. If not, the use of a marrow homograft might be extremely dangerous. If he has, the threat of a delayed marrow reaction becomes an acceptable risk, since the patient

TABLE II
MORTALITY IN MICE AFTER WHOLE BODY X-RAY
Dose of Radiation: 30 Day Mortality

Type of Marrow Graft	*400r*	*500r*	*600r*	*700r*	*800r*	*950r*	*1150r*	*1300r*	*150 Days Mortality after 1150r*
None	0	0	5%	30%	80%	100%	100+%	100+%	———
Isograft	0	0	0	0	0	5%	25%	70%	25%
Heterograft	0	35%	50%	100%	55%	20%	25%	80%	65%

has no chance of survival without a marrow graft. The estimation of the degree of injury is most difficult, even when the dosage parameters are known, and is the subject of my second address to this meeting[12]. When the decision is made to graft, the most likely course of events that can be pieced together from available evidence is that protection from radiation lethality will be obtained. Cells deriving from the graft will become detectable in the recipient's peripheral blood in varying percentages. Two to six weeks later, a second reaction will occur, manifested by fever and, perhaps, diarrhea, splenomegaly and weight loss. The upshot of this is most commonly the disappearance of graft cells and the reversion of all peripheral cells to the recipient's original type. Seemingly, growth of the graft to proportions sufficient for reaction against the host is paralleled by recovery of surviving islands of host cells. The delayed reaction is therefore not unilateral and the host usually is the winner. One is led to believe in such cases that the radiation received was not in fact lethal since enough native marrow was spared to permit regrowth.

Example from Leukemia

Another example can be taken from the patient with leukemia in whom a single massive attempt to sterilize the tumor is to be made. This patient will be deliberately exposed to lethal or supra-lethal chemotherapy or radiation with the purpose of killing all leukemic cells wherever they might be circulating. Clearly, this program will also effectively obliterate all normal marrow cells as well. The patient is then protected by a marrow graft. Ideally, this would be taken from an identical twin but generally a homograft is required. The results of this approach have been generally failures in both animals and man, and the failures have been due almost exclusively to regrowth of the tumor. Protection by the marrow grafts, although it does occur, becomes academic if the main objective cannot be achieved. It now seems certain that sterilization of leukemia requires doses of toxic agents far higher than those producing lethal marrow injury, and entering into the range where damage to other radiosensitive tissues such as the intestinal mucosa and central nervous system becomes limiting.

Finally, the use of the pure autograft system has been disappointing. Although results of experiments in animals, as shown in Table II, show excellent protection by isografts (tantamount to autografts), results in man have not been so gratifying. There is, first of all, no positive method for proving effectiveness. The graft cells differ in no respect from surviving marrow cells and, therefore, recovery from a lethal exposure could as easily be attributed to one as to the other. Second, there is no possibility of the control series which make the animal experiments conclusive. No one will expose a group of patients to a lethal form of therapy with no protection at all. Added to this, we ignore in almost all cases detailed knowledge of the exact lethal dose of any of the agents used, from nitrogen mustard to whole-body X-radiation, so mere survival cannot be taken as an end-point. Perhaps if the dosage used were raised to really frightening proportions, simple survival would become a valid criterion, but there are limits to experimentation on man.

Interference

These assorted drawbacks interfere with both the planning and interpretation of marrow autografting experiments in man. Some workers have been enthusiastic over their results and quite definite that autografts do provide the desired protection[13]. Others have been more cautious. One thing is sure: bone marrow autografting is not a 100 per cent sure fire guarantee against marrow injury and therefore does not permit an across-the-board increase in the dosage of all toxic anti-cancer drugs. Even the best series have failures, and the troublesome things about these failures is that we do not understand the reasons for them. Until these deficiencies of knowledge are overcome, the clinical usefulness of all forms of marrow grafting in man is going to progress very slowly. At the moment, their use is declining, even on an experimental basis, and is not likely to recover until a significant new technical advance is made.

Despite these guarded comments and speaking at least for myself, I should feel far more at ease around a nuclear reactor or in a nose cone traversing the Van Allen belts if I knew that there were, safely tucked away in a deep-freeze, a few billions of my own marrow cells. I would feel as friendly toward this little cache as I would toward an identical twin, if I had one.

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(A complete bibliography may be obtained by writing to JMAG, 938 Peachtree Street, N.E., Atlanta, Ga. 30309.)

CLINICAL EXPERIENCES WITH MEPIVACAINE (CARBOCAINE)

Z. W. Gramling, M.D.; R. G. Ellis, Jr., M.D.,** and
P. P. Volpitto, M.D., *Augusta*

■ ***A double blind study of the anesthetic potency and duration of action of mepivacaine, lidocaine and procaine is included in this paper.***

MEPIVACAINE (Carbocaine)* is a local anesthetic whose chemical, physical, and anesthetic properties were reported by Ekenstam and associates[1] in 1956. Toxicity studies[2] and clinical trials[3] produced results which were promising.

Since that time numerous clinical and laboratory studies employing mepivacaine have been published. Its anesthetic properties were reported to be equal if not superior to lidocaine,[4,5,6] to which it bears a marked anesthetic and chemical similarity.

This paper describes a limited study of anesthetic potency, duration of action, and clinical experiences with mepivacaine.

Anesthetic Potency and Duration

Using human volunteers, a double blind study was performed comparing the anesthetic potency and duration of mepivacaine, lidocaine, and procaine with and without epinephrine. Normal saline was employed as a control. The results of this study are presented in Table I.

The results indicate that in equal concentrations (0.5%), mepivacaine has superior anesthetic potency and duration to both lidocaine and procaine. When combined with 1:200,000 epinephrine, the duration of action of mepivacaine was significantly prolonged but was about equal to that observed with lidocaine. Some investigators[1,3] have reported little or no prolongation of action with mepivacaine when combined with epinephrine.

From the Department of Anesthesiology, Medical College of Georgia and the Eugene Talmadge Memorial Hospital.

**Supplied by the Winthrop Laboratories, 1450 Broadway, New York 18, New York.*

***Now in private practice in Marietta, Georgia.*

Mepivacaine was used to produce conduction anesthesia in 266 surgical patients. The distribution of techniques employed is summarized in Table II. The age range was one to 88 years with about equal sex distribution. The physical status was either one or two in a majority of patients.

One-fourth of these patients were given no preanesthetic medication. The remainder were given a sedative drug about one hour prior to anesthesia—pentobarbital sodium (100 mgm) in most patients, while elderly patients received either chloral hydrate (500 mgm) or meprobamate (400 mgm). Narcotics and/or a drying agent were not used. A

TABLE I

DOUBLE BLIND STUDY IN TEN HUMAN VOLUNTEERS COMPARING POTENCY AND DURATION OF ACTION OF .3—.5 ML OF 0.5% PROCAINE, LIDOCAINE AND MEPIVACAINE INJECTED INTRADERMALLY IN FOREARM. REACTION TESTED BY EVALUATION TO PIN PRICK

Agent	Moderate* Analgesia No. Subjects	Total* Analgesia No. Subjects	Duration of Anesthesia (Mins.) Average	Duration of Anesthesia (Mins.) Extremes
WITHOUT EPINEPHRINE				
Normal Saline	2	1	30	30
Procaine	5	3	20	15 — 30
Lidocaine	8	6	75	30 — 340
Mepivacaine	10	9	108	15 — 240
WITH 1:200,000 EPINEPHRINE				
Normal Saline	3	2	30	30
Procaine	5	4	56	15 — 120
Lidocaine	10	10	228	60 — 435
Mepivacaine	10	10	240	135 — 315

**Subjects who demonstrated moderate analgesia had diminished sensation to pin-prick but total analgesia was lacking.*

majority of the anesthetic procedures were performed by anesthesiology residents at various stages of training.

Tables III, IV, and V present a detailed tabulation of the anesthetic technique employed, concentration and dose of drugs used, rapidity of onset and duration of action observed.

The concentrations used varied from 0.5 per cent for subcutaneous infiltration to 1.5 per cent for large nerve and epidural block. These concentrations were generally adequate for anesthesia and muscle relaxation.

The average total dose of mepivacaine used was 410 mgm for single injection and 306 mgm for continuous techniques.

The duration of anesthesia was not determined on all patients. However, the average duration of the surgical procedure, which would imply at least minimal anesthetic duration, varied from 79 to 141 minutes with the single injection procedures.

Only five of the patients anesthetized for either inguinal or abdominal field blocks received mepivacaine in combination with 1:200,000 epinephrine. We were unable to note any significant variation of the anesthesia produced in these subjects.

Failure to achieve satisfactory anesthesia occurred in 30 (11%) of our patients and was attributed to technical failure.

Complications were rare in this study. Subjective

TABLE II
ANESTHETIC BLOCKS PERFORMED WITH MEPIVACAINE

Epidurals	
Lumbar	123
Caudal	41
Brachial Plexus (Supraclavicular)	8
Axillary	34
Cervical Plexus	8
Femoral Sciatic	14
Intercostal	7
Abdominal Field	4
Inguinal Field	15
Miscellaneous	12
Total	266

TABLE III
USE OF MEPIVACAINE IN PERIPHERAL NERVE BLOCKS

Type of Block	No. of Patients	Conc. Used	Average Dose (Mgm)	Average Onset (Min.)	Average Surgical Time (Min.)	No. of Poor Results
Axillary	34	1.5%	304.5	5	91.6	4
Brachial Plexus (Supraclav.)	8	1% & 1.5%	400	7.5	92.5	2
Femoral Sciatic	14	1% & 1.5%	392	—	96	4
Cervical Plexus	8	1% & 1.5%	390	4	102.5	0

TABLE IV
USE OF MEPIVACAINE IN FIELD BLOCKS

Type of Block	No. of Patients	Conc. Used	Average Dose (Mgm)	Average Onset (Min.)	Average Surgical Time (Min.)	No. of Poor Results
Inguinal Field Block	15	½% & 1%	410	5	141	1
Abdominal Field Block	4	½% & 1%	362	Not determined	97.5	1

TABLE V
USE OF MEPIVACAINE IN EPIDURAL BLOCKS

Type of Block	No. of Patients	Conc. Used	Average Dose (Mgm)	Average Onset (Min.)	Average Surgical Time (Min.)	No. of Poor Results
Lumbar Epidurals	123	1.5%	306.8	5-½	170	12
Caudal Epidurals	41	1%	282	5	79	6

TABLE VI

FREQUENCY AND SEVERITY OF HYPOTENSION WITH CAUDAL ANESTHESIA PRODUCED BY VARIOUS ANESTHETIC AGENTS

Agent	Total Cases	Decreases in Systolic Blood Pressure				Total Incidence %
		30-50 mm Hg	Incidence %	More than 50 mm Hg	Incidence %	
Piperocaine (Metycaine)	159	22	13.8	31	19.4	33.2
Intracaine (Maxicaine)	53	7	13.2	2	3.7	16.9
Procaine	37	4	10.8	2	10.8	21.8
Hexylcaine (Cyclaine)	140	10	7.1	8	5.7	12.8
Mepivacaine (Carbocaine)	35	4	11.4	2	5.7	17.1

burning, local irritation, or tissue reaction to injections of mepivacaine were not encountered. Manifestations of toxicity to the central nervous system were not seen in this study.

Hypotension was the only significant cardiovascular complication encountered and occurred only in those patients given either a caudal or lumbar epidural block. Of the 164 patients anesthetized in this manner, 16 per cent demonstrated a decrease in the systolic pressure of 30 to 50 mm Hg and seven per cent showed a decrease greater than 50 mm Hg. All hypotensive patients responded to the administration of either oxygen by mask and/or small doses of vasopressor drugs given intravenously. Sympathetic ganglionic block was a component of the anesthetic technique in all subjects who developed hypotension.

Comparison

A comparison of the incidence and severity of hypotension observed with caudal anesthetic produced by various anesthetic agents is given in Table VI. The results shown with piperocaine (Metycaine), maxicaine (Intracaine), hexylcaine (Cyclaine), and procaine were collected from a previous clinical study by one of us (PPV). These results indicate that with caudal anesthesia produced by mepivacaine, hypotensive complications occurred with no greater frequency nor severity than those produced with other agents employed by us.

Technical Complications

Four subjects presented interesting technical complications. All were related to the placement of a No. 3 French nylon ureteral catheter in the epidural space for continuous injection. In one instance a laminectomy was required to remove the tip of a catheter which had been shorn off in the epidural space. Three others were X-rayed for catheter position following failure to develop satisfactory anesthesia. The catheter had been pushed out of the epidural space through an intervertebral foramen in two patients while the third subject had marked coiling of the catheter in the epidural space.

Summary

A double blind study of the anesthetic potency and duration of action of mepivacaine, lidocaine, and procaine is presented. The results in this study indicate that mepivacaine has a longer duration of action than either lidocaine or procaine. When combined with 1:200,000 epinephrine, the anesthetic action was significantly and equally prolonged with both mepivacaine and lidocaine.

Hypotension was the most commonly observed complication, and in all instances developed following either caudal or lumbar epidural techniques which resulted in various degrees of sympathetic ganglionic blockade. Central nervous system or local irritative complications were not observed in this study.

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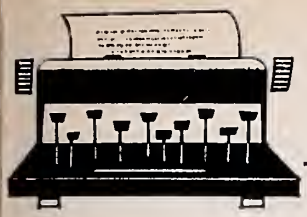

EDITORIALS

Medical Laboratory Technology, Present and Future

THE PURPOSE of this paper is to acquaint physicians with the present status of laboratory medical technology and what the future may hold for this field.

The practice of laboratory medicine is generally directed and practiced by pathologists with the assistance of various paramedical personnel. These include registered medical technologists,[2] cytotechnologists,[3] histologic technicians and radioisotopic technicians. These registered individuals have been trained in AMA approved schools, usually indicating good acceptable training. In addition, there are medical laboratory assistants (certified laboratory assistants), a recently developed category of laboratory training. These individuals are high school graduates with one year of laboratory training. They serve as assistants to registered medical technologists who usually are B.S. degree students of medical technology.

Worker Variety

There is a variety of laboratory workers termed laboratory technicians, which includes people with no formal training, graduates of commercial schools or of armed services schools. These technicians are generally less well-trained than registered medical technologists and generally should work under the supervision of registered medical technologists. Many of this group belong to organizations not recognized by the AMA. However, many individuals in this category may now become members of societies recognized by organized medicine.

It is evident that for laboratory medicine and medicine generally to be practiced properly and effectively, we must have well-trained medical technologists to perform the technical procedures.[4]

The number and complexity of new procedures and the new automated devices being added each day require more and more skillful technologists. New research facilities, hospital beds, increasing numbers of physicians and population require greater numbers of paramedical personnel.

In order to demonstrate the present need for paramedical personnel, Fincher[1] made an excellent report of his findings in 1962 for the State of Georgia. A similar report for Metropolitan Atlanta was made by the Subcommittee on Education and Research in Health of the Community Council of the Atlanta Area, Inc., in 1963.[5] Fincher found in his survey of Georgia that 900 people were employed as laboratory technicians. In 1962 there were 45 budgeted vacancies for laboratory technicians. An estimated 1,477 will be needed by 1970. The additional need annually at the present time is 167, excluding the number completing training annually. We have one school graduating 11 per year at the present time (Clarksville, Georgia).

There were 513 persons employed as medical technologists in Georgia in 1962. Of these, 193 were registered medical technologists (American Society of Clinical Pathologists). There were 53 positions vacant at the time of the survey. It is estimated that 838 will be needed by 1970.

To Cover Requirements

In 1962 there were 61 students completing medical technology training. The total additional need, excluding those now graduating, is 69 per year to cover attrition and growing requirements.

There are 17 hospital schools of medical technology where students with three years of prerequisite college credits can take the fourth year of internship and become registered medical technologists. The total number of hospital training positions available throughout the State is 177. The total number of students expected to complete training in 1962 was 61. Seven colleges in the state have preparatory academic programs for medical technology.

The recommendations made by Dr. Fincher are a propos, and are quoted as follows in abbreviated form:

1. Education and training programs for nursing and paramedical personnel in Georgia should be coordinated to the fullest extent.
2. Colleges and vocational schools should assume a greater portion of responsibility for the education and training of nursing and paramedical personnel.
3. Colleges and universities within the state should cooperate with the hospital and vocational schools in preparing teaching staff for nursing and paramedical programs.
4. Hospitals located in a common metropolitan area should coordinate their separate training programs, employing common facilities and faculty for centralized lectures and demonstrations, and using facilities and faculty of public educational institutions as much as possible.
5. Persons involved in the recruitment, selection, training, placement and supervision of nursing and paramedical personnel should become better informed about the duties, functions and responsibilities of persons employed in paramedical fields extrinsic to their own.
6. An effective and continuing statewide system of recruitment and placement for nursing and paramedical students should prove highly beneficial to the state's various educational and training institutions.
7. An effective and continuing statewide system of scholarships and financial aid would greatly facilitate the educational efforts of many nursing and paramedical students.
8. Better advisement and counseling services in the colleges and universities should facilitate the transfer of nursing and paramedical students from institution to institution.
9. Better advisement and counseling services are also needed in the secondary schools of the State.
10. The transfer of students from hospital schools to collegiate schools might well be studied in more detail.
11. Present policies of utilization might be examined with profit by employers of nursing and paramedical personnel.
12. The problem of excessive employee turnover should be examined carefully by employers of nursing and paramedical personnel.

It is evident that these are significant and broad recommendations which will require the concerted and coordinated action of many. Certainly, if many of these recommendations are not carried out, we will find a perpetuation of fine hospital facilities but inadequate personnel, both in quality and quantity, to render the service necessary to enable the physician to practice good medicine.

Severe Shortage

Over the past several years, efforts have been made to acquaint certain groups and individuals with the severe shortage of medical technologists. Up to the present time, these efforts have yielded no significant results. It is difficult to determine where the responsibility in such training lies; however, the general population will suffer the consequences of the failure to train such personnel. It would appear that their knowledge of the seriousness of this situation might stimulate proper efforts toward a solution of this problem.

John T. Godwin, M.D.

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AMA Clinical Meeting Highlighted

The following is a summary of the activities of the House of Delegates at the American Medical Association's Seventeenth Clinical Meeting held December 1-4, 1963, in Portland, Oregon. It is not intended to be a detailed account of the proceedings, but merely covers the highlights of that meeting.

The House of Delegates of the AMA, the policy making body for organized medicine in the United States, acted on many matters at its most recent meeting in Portland. Among the subject areas before the House for deliberation were, tobacco and health, voluntary health agencies, blood banks, com-

pulsory social security coverage for physicians and the American Medical Association Education and Research Foundation.

The House at its opening session expressed deep shock at the tragic death of the late President Kennedy and directed that a letter of sympathy be sent to the late President's family. The House also pledged its support to President Johnson in forging national unity in the weeks and months ahead and offered the AMA's resources, counsel and cooperation on matters of health.

Tobacco and Health

The House approved a Board of Trustees proposal that the American Medical Association Education and Research Foundation undertake a comprehensive program of research on tobacco and health.

Agreeing that many gaps exist in knowledge about the relationship between smoking and health, the House declared that the study should be "devoted primarily to determining which significant human ailments may be caused or aggravated by smoking, how they may be caused, the particular element or elements in smoke that may be the causal or aggravating agent, and methods for the elimination of such agents."

The action called for procuring a project director "whose experience, qualifications and integrity will assure that such a research project will be conducted effectively, exhaustively and with complete objectivity."

The House agreed that the project should be financed by a substantial contribution from the AMA and that contributions should be solicited from other sources. It was emphasized that contributions would be accepted only if they are given without restrictions.

Subsequent to this action, the Board of Trustees voted to contribute $500,000 to help finance this research program.

Voluntary Health Agencies

In approving a Board of Trustees report on professional relationships with voluntary health agencies, the House declared that the "AMA maintain its policy of neither approving nor disapproving national voluntary health agencies." It also agreed "that the AMA, through its Committee on Voluntary Health Agencies, maintain its position of offering guidance on medical aspects of national voluntary health agency programs."

The House approved the "Principles for Medical Guidance to National Voluntary Health Agencies," which contained a new definition of voluntary health agency, objectives of the Committee on Voluntary Health Agencies, and a list of suggested mutual obligations between the AMA and the national voluntary health agencies.

Blood Banks

The House adopted a policy statement pointing out that in recent years there has been a dramatic growth of blood banking facilities in the United States and declaring that "it is highly essential that the organization of new blood banking programs and the modification of existing ones should have, in the interest of public health and safety, the approval of the county or district medical society and, therefore, should be coordinated with existing approved blood banking facilities." The House also approved a floor amendment stating that since a blood bank can well be considered a medical facility, the top authority in a blood bank should be a physician.

Compulsory Social Security

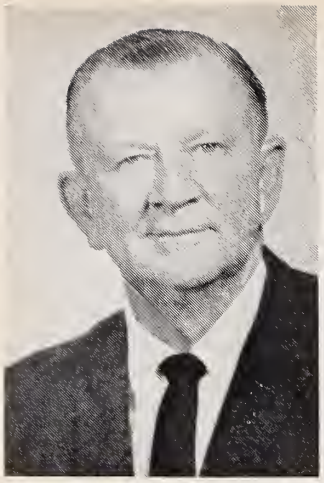
The House also adopted a resolution proposed by the Georgia Delegation which stated in effect that the AMA reaffirm its standing policy of opposition to compulsory social security coverage for all physicians. The Michigan Delegation offered such a compulsory social security resolution and the Georgia resolution was adopted as an expression of opposition by the House to the Michigan resolution.

AMA-ERF

The pharmaceutical house of Merck, Sharp and Dohme made its third contribution of $100,000 to the student loan fund of the American Medical Association Education and Research Foundation. The AMA-ERF also received a total of almost $400,000 from physicians in three states.

PROGRESS THROUGH PRIVATE INITIATIVE

In 1962 50,000 substances were screened for anticancer activity, and about 175 were in clinical use. Progress against Hodgkin's disease and leukemia was made. Hormonal treatment in heart disease showed promise. Immunization against tuberculosis seemed possible. Oral polio vaccine became available, and a measles vaccine was in final testing. There were new developments in a dozen other areas, including multiple sclerosis, mental illness, infertility, and even the common cold. If the drug companies are proud of the road they have travelled, and determined to remind the public how much has been done through private initiative, they are equally determined to continue going in the same direction, and at a faster rate.—Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, in *West Coast Druggist,* January, 1963.



MEDICAL ASSISTANCE TO THE AGED

GEORGE R. DILLINGER, M.D.

THE KERR-MILLS LAW is an effective instrument of government for taking care of the medical needs of the aging who can provide for their daily necessities but who cannot withstand an unusual medical expense without undue financial hardship. No other federal law, such as King-Anderson, is necessary nor is it necessary for any new Georgia law to be enacted. Under the sponsorship of Governor Sanders, enabling legislation was enacted approximately three years ago.

For two years the first phase of Kerr-Mills has been functioning well in Georgia. Some 90,000 OAA recipients are being taken care of successfully. Our need now is for the state administration to make funds available for the care of our aging people over 65.

How many physicians and legislators know the difference between King-Anderson and Kerr-Mills? Every physician and legislator must be fully informed. The state administration and the various departments of state must be informed so that our aging people may be protected from "catastrophic illness."

Let's all work together to accomplish this most important task, adequate medical care for all our aging people.

President, Medical Association of Georgia

ATLANTAN TESTIFIES BEFORE HOUSE WAYS AND MEANS COMMITTEE

On Thursday, November 21, 1963, Dr. J. Frank Walker, Atlanta, presented testimony on the King-Anderson bill before members of the House Ways and Means Committee in Washington, D.C. As Speaker of the MAG House of Delegates, Dr. Walker testified for the Medical Association of Georgia in opposition to the King-Anderson bill and in support of the Kerr-Mills Law as implemented in Georgia.

1963 Mandate

Based on the mandate of the 1963 MAG House of Delegates, Dr. Walker appeared as the Association witness to make a detailed statement on the Georgia progress in health care of aged. Along with some eleven other state medical associations, Georgia facts and figures on available care for the aged were presented to substantiate the MAG position that: (1) need for the King-Anderson type legislation does not exist in Georgia; (2) need must be the sole criteria for any program of health care assistance; and (3) that Georgia's present program such as Kerr-Mills and others are now able to meet and will continue to meet the health care needs for our senior citizens.

Some confusion was clarified when a member of the Ways and Means Committee cited a U.S. Senate Subcommittee statement saying that at the present time Georgia was not participating in the Kerr-Mills Medical Assistance to the Aged Law. Dr. Walker replied that under the Old Age Assistance provisions of the Kerr-Mills Law, Georgia was indeed participating, in that one out of three of the state's over age 65 population was eligible for 60 days hospitalization per year and up to 365 days nursing home care per year. Based on the fact that there were no other questions, it is believed that the 17 page MAG statement conclusively covered the Association stand on this matter.

These hearings were adjourned on the following day by House Ways and Means Committee Chairman Wilbur Mills due to the tragic death of the late President John F. Kennedy. Whether or not the hearings will be reconvened is not presently known.

It is believed that 1964 will become "the moment of truth" for the legislative fate of King-Anderson type legislation. Certainly medicine's opposition to social security health care regardless of need is well known—but it must be reiterated, if it is to prevail in the interests of better patient care. It now becomes the responsibility of each individual physician to sustain the principles at stake in this issue of government medicine versus the system of private patient care.

CANCER DETECTION

A. H. Letton, M.D., *Atlanta*

WITH FOUR TIMES as many Georgians dying of cancer as from traffic accidents, and nearly 1,000 of them being "needless deaths" in that they could have been prevented if the cancer had been detected and treated earlier, emphasis—both professionally and from a layman's approach—on an annual "cancer" checkup as a key to more cancer cures seems justified.

One Half Cured

Today, it is estimated that at least one half of all cancers can be "cured," if treated adequately and early. However, the statistics show that only one-in-three cancer patients is living for five years after treatment to become a "cured" patient.

This variation—one-in-three saved, compared to the one-in-two who could be saved—accounts for the 1,100 needless cancer deaths in Georgia last year.

As a point of emphasis to promote this life-saving "cancer consciousness" among laymen and doctors alike, the Professional Information Committee of the Georgia Division of the American Cancer Society has initiated the "EVERY DOCTOR'S OFFICE A CANCER DETECTION CENTER" again. This program was mentioned in an article on this page in the April, 1963 issue of the MAG Journal.

Calling Attention

This program offers to any licensed physician in Georgia at no cost a series of literature pieces and certificates, calling attention to the participating doctor's consideration of and attention to physical indications of possible cancer to insure the earliest possible treatment.

The American Cancer Society will provide participating doctors the following items in sufficient quantity and at no cost:

1. *TAKE ONE LEAFLET;* for display in the doctor's reception room for waiting patients to take and read.

2. *AN APPOINTMENT—INSTRUCTION SLIP;* for use by the receptionist or secretary in scheduling a physical examination. In addition to the date and time of the appointment, this slip lists actions the patient must take to prepare for the examination before coming to the office.

3. *EVERY DOCTOR'S OFFICE A CANCER DETECTION CENTER CERTIFICATE;* a framed certificate attesting to the doctor's participation in this life-saving program.

The TAKE ONE LEAFLET is a small, two-color literature piece that is headed—"Your Doctor Is Helping Prevent Incurable Cancer."

Inside it reads: "Cancer Detection Examination."

"When detected and treated EARLY, most cancer can be cured.

"Have you had your examination this year?

"Many lives can be saved by this examination.

"This cancer detection examination will include: inspection of the entire skin, the mouth, nose, throat, the neck (including thyroid), the breasts, the abdomen, the pelvis in the female (including also a Pap smear), the rectum (including the prostate in the male), and a sigmoidoscopic examination of the lower colon, as well as any other examination your physician feels is indicated."

The SEVEN DANGER SIGNALS, that may or may not mean cancer, are then listed:

Unusual bleeding or discharge;
A lump or thickening in the breast or elsewhere;
A sore that does not heal;
Change in bowel or bladder habits;
Hoarseness or cough;
Indigestion or difficulty in swallowing;
And, change in a wart or mole.

The leaflet reminds the patient that "a regular annual check up is your best insurance against *incurable* cancer."

You may obtain these materials in any amounts you may need by writing to: AMERICAN CANCER SOCIETY, Georgia Division, 2025 Peachtree Road, N.E., Atlanta, Georgia.

340 Boulevard, N.E.

Approved by Professional Education Committee, Georgia Division ACS.

THE MANAGEMENT OF PULMONARY EMPHYSEMA

S. H. Story, Jr., M.D., *Valdosta*

PULMONARY EMPHYSEMA is a disease of uncertain etiology that is manifest clinically by shortness of breath and cough. Pathologically there is enlargement of the terminal air spaces—the alveolar ducts and alveoli. Physiologically the following abnormalities of pulmonary function are often encountered: severe, sustained airway obstruction; increased lung volume; impaired mixing of gases within the lung; hypoxemia; carbon dioxide retention; pulmonary hypertension; reduction of the diffusing capacity ("alveolar-capillary block"). Two major pathogenetic mechanisms seem clearly implicated: 1) respiratory irritants—notably tobacco smoke; 2) repeated bronchiolar infections or chronic bronchitis.

Suggested Diagnosis

A history of chronic cough and exertional dyspnea in the absence of obvious heart disease should suggest the diagnosis of Emphysema. Decreased breath sounds, prolongation of expiration, and terminal expiratory wheezing are common physical findings. Men are affected more often than women, and it is a disease of middle age. Positive radiographic findings are seen usually in fairly advanced, obvious cases and are therefore of limited diagnostic help. Decreased timed vital capacity and reduced maximum breathing capacity are simple, confirmatory pulmonary function tests requiring only a spirometer for performance.

The clinical course varies from a rapid downhill course to the more usual slowly progressive dyspnea punctuated by repeated respiratory infections. Death usually results from either carbon dioxide narcosis or cor pulmonale.

An interested, sympathetic physician can do much to alleviate the suffering of these patients. In my experience the greatest hurdle is to convince the patient that he must give up cigarettes. I have found the most convincing argument against smoking is to introduce the patient to a "pulmonary cripple"; this has succeeded for me when all else has failed. The importance of this measure cannot be overemphasized; unless smoking is stopped, your therapeutic efforts are doomed to failure. The patient should be warned that it might take a month for the cough to improve.

Medicinal Mainstays

Bronchodilators are the medicinal mainstays of therapy. Generally they are more effective when given by nebulization. Isuprel 1:200 or Epinephrine 1:100 in a hand nebulizer will usually provide relief of symptoms; over 80 per cent of patients with Emphysema have some reversible bronchospasm. Proper use of the nebulizer is important; an oral preparation such as Ephedrine or Elixophyllin may be more effective for some of the patients. With respiratory infections a parenteral bronchodilator such as Aminophyllin may be lifesaving. Some experts advocate intermittent positive pressure breathing with a Bennett or Bird machine that nebulizes the bronchodilator of choice.

Prompt and vigorous treatment of complicating respiratory infections is of utmost importance. A "stat" gram stain may help in selection of an antibiotic until sensitivity tests are reported on the sputum culture. The proper drug should be used in full dosage for a prolonged period of time (2-3 weeks). Prophylactic antibiotics are not recommended.

Adrenal steroids should be used only when the situation appears grave or when there is considerable wheezing present. As improvement appears, these agents should be tapered off.

Opiates are quite dangerous, and salicylates are recommended for pain relief. Thorazine and chloral hydrate are the safest sedatives.

Heart Failure

One fourth to one third of the patients with Emphysema will develop right heart failure or Cor Pulmonale. Often this is precipitated by an acute infec-

tion and consequent hypoxia; a rising hematocrit often heralds this complication. The usual measures (digitalis, diuretics, low-salt diet, etc.) are helpful, but the primary goal is to improve ventilation; relief of the hypoxia will often lead to disappearance of the signs of right ventricular failure. Small phlebotomies (250-300 cc) might be necessary to keep the hematocrit about 55 per cent.

Surgical measures can be of benefit occasionally. Excision of a large bleb that is compressing adjacent, normal lung tissues can be quite rewarding. Tracheal strictures or intrabronchial tumors can simulate the expiratory obstruction seen in Emphysema.

Prime Importance

Of prime importance is the recognition and treatment of respiratory acidosis and carbon dioxide narcosis which are more frequent than generally appreciated. These patients become restless, irrascible, forgetful, and somnolent. There is often striking conjunctival suffusion ("frog eyes"). This syndrome may be precipitated by one of the following: oxygen administration, depressant drugs, infection, congestive heart failure, spontaneous pneumothorax, or a surgical procedure. If ventilation is not improved the patient will die. At the time of diagnosis the patient should be bronchoscoped and suctioned out as well as possible; he should be placed in a tank respirator and given pure oxygen; tracheostomy is often necessary. Antibiotics, parenteral bronchodilators, steroids, and digitalis should be used. A vigorous attack is often successful.

In conclusion, success is most apt to come if you can convince your patient to stop smoking, teach him to use a nebulizer properly, and promptly treat his respiratory infections vigorously. Be alert to detect the complications of right heart failure and carbon dioxide narcosis; early treatment of these conditions is vital.

2200 Glyndale Drive

Prepared at the Request of the Committee on Professional Education of the Georgia Heart Association.

BIOMETRY DEPARTMENT ESTABLISHED AT EMORY

The newest department at Emory University's medical school is biometry begun this fall with Dr. Malcolm Turner as Chairman.

Biometry, the science that applies mathematical and statistical methods to biological facts, began at the University of London in 1904 with a chair of applied statistics. Johns Hopkins University introduced it into this country and now there are many graduate programs.

The Emory arrangement may be a first, however, in that Emory biometricians believe no other medical school has its own department of biometry though some share them in cooperative arrangements with schools of public health.

Dr. Turner, the chairman, is also Managing Editor of the international journal *Biometrics*. Dr. Turner received his B.A. at Duke, and his M.S. and Ph.D. degrees at North Carolina State. He was an analytical statistician for the Communicable Disease Center, an Assistant Professor of Cincinnati Medical School and Chairman of the Division of Biometry of the Medical College of Virginia, before coming to Emory.

Among the other four faculty members of the department will be two Ph.D.s and two persons with both M.D. and Ph.D. degrees.

In addition to teaching, the department will work closely with researchers in many areas of the medical school and other parts of the university. Faculty members will also advise practicing physicians who come with special problems that can be solved with the methods of biometry.

SEMINAR ON MENTAL HEALTH TO BE PRESENTED TO GEORGIA PHYSICIANS AND THEIR WIVES

The committees on mental health of the Medical Association of Georgia and the Woman's Auxiliary to MAG have completed plans for a seminar to be held at the Milledgeville State Hospital on Sunday, February 9, 1964, from 10 a.m. to 4 p.m. The subject for a panel and general discussion will be: "Georgia's Mental Health Program — What Can We Do NOW?" Luncheon will be served for $1.00 per person.

As interested citizens and in support of medical guidance and leadership in our major health problem today, *all physicians and their wives* are cordially invited and urged to attend this important meeting.

Because of plans for luncheon, advance notice for those who wish to attend is requested not later than February 1, 1964. Those planning to attend may fill out the following blank and mail it to: Mrs. J. G. Bohorfoush, P.O. Box 325, Milledgeville, Georgia.

Dr. and Mrs. _____

plan to attend the mental health seminar in Milledgeville on February 9, 1964, and will be present for the luncheon at $1.00 per person.

LEGAL PAGE

CONDOMINIUM — A NEW CONCEPT OF OWNERSHIP

Carl H. Cofer, Jr., *Atlanta*

A RECENT UPSURGE in the construction of professional buildings and small clinics suggests that physicians are finding a more rewarding practice by being in proximity with other members of their profession. This coming together of several doctors to practice under one roof finds some explanation in the situation created by the increased specialization of modern medicine which, in turn, requires the patient to seek different doctors for different ills. It, therefore, becomes desirable to have a particular specialist nearby for consultation or referral. In addition, a recognizable structure in a central location where the community knows medical help is available tends to attract those in need of medical attention who have no regular doctor and would otherwise not know where to turn.

Specialized

A structure to house doctors must be specialized in layout and facilities. Presently, this specialized type of building is financed either by some energetic promoter or by a group of doctors through cooperative ownership of the entire structure. The latter approach finds its greater application in the smaller clinic.

Based on an Act passed into law by the 1963 Georgia Legislature, a new method of organizing and financing a professional building has been made available for the first time in this state. This new concept in property ownership is called a condominium.

New Conception

A condominium is absolute ownership of a single unit in a multi-unit building, with collective ownership of the common areas (land, hallways, elevators, etc.). At first blush, this idea appears to be nothing more than the old-styled cooperative with a fancy new name. However, a closer examination reveals several distinctive differences between the condominium and the cooperative. In a cooperative, every member owns an undivided interest in the common building relative to financial liability for the debts of the group. Even where a corporation is formed to own the cooperative facility, a default of one tenant places the burden of his liability jointly on the other tenants. This added burden can, in turn, create a snowballing effect which causes the joint ventures to end in financial failures. With a condominium, this cumulative pressure is alleviated in that tenants are not responsible for the default of others except as to the defaulting party's interest in the common areas.

Individual Ownership

In a condominium, each individual owns his particular area of air and floor space. He can borrow money, offering his condominium estate as security for the loan. Thus, each of the tenants can tailor his own type of financing to suit his particular needs with any lending institution he chooses.

The cooperative venture is normally financed in its entirety by one or two lenders. The advantages of a condominium over the cooperative in this area are readily apparent, both from the borrower's and lender's points of view. The borrower can select his source of funds and terms of financing with some degree of freedom. The lender, on the other hand, can minimize his risk by placing a relatively small investment in a particular project. Moreover, financing of the entire venture becomes easier since no small group of investors is called upon to take all of the risks.

Initial Commitment

Of course, an initial commitment from a responsible lender will usually be necessary. However, this obligation can be reduced or eliminated as the various condominium estates come into being and, thereby, become eligible as security for loans in their own right. The sale of each condominium will supply the funds to repay the original commitment. Thus, the initial creditor is replaced by the various lenders who have taken individual condominiums as their collateral.

The condominium is now available in Georgia. The problem is to find some group that will use this new concept for the first time to finance a professional building.

Suite 1220, C&S Bank Building

Prepared at the request of The Medical Association of Georgia. Mr. Cofer is an associate of Alston, Miller & Gaines, General Counsel to The Medical Association of Georgia.

THE DOCTOR AND THE MENTAL HEALTH ASSOCIATION

Frank Adams Smith, *Atlanta*

THE GEORGIA ASSOCIATION for Mental Health has assumed the awesome task of helping the mentally ill and speaking in their behalf. While no homestead claim has been filed on this problem area and no assumption made for monopoly rights, GAMH is in truth the only statewide lay organization devoting full time to improving care of the mentally ill and to promoting better mental health. A leadership role, however, can be validated only by constructive results.

If mental illness is the biggest, the most pressing and complex health problem in our society, why has it been so neglected over the ages? Has neglect and apathy formed a protective shield against our unconscious fears and guilt feelings? Do doctors as well as lay people share responsibility for this neglect?

Key Figure

The medical doctor is without question the key figure in the mental health movement, yet up to now the majority of doctors have refused to assume this role of leadership with its challenges and opportunities in one of the most liberating movements of the twentieth century.

The medical doctor in America today is without question the best trained physician the world has ever known, yet there is a de facto rejection of the mentally ill by the medical profession as a whole. To the layman, this appears to be the fault of the training, otherwise superb, in medical schools which has neglected to inculcate an understanding of the psychological aspects of illness.

Plato recognized the "wholeness" of man; Paracelsus had no doubts of the "unity" of man, but the medical man, with numerous exceptions, through the ages has been reluctant to regard medicine as more than a medico-bio-chemical science, blocking out recognition that medicine is also a psycho-social science.

Medicine cannot be good medicine unless it treats the whole man, unless the patient is regarded as a person rather than as a symbol of disease—a person with a family, burdened with economic and social responsibility—and usually "suffering the slings and arrows of outrageous fortune." Disease in the human being cannot be isolated from its emotional components.

When a medical doctor unconsciously rejects the mentally ill, he attempts an impossible dichotomy in medical practice for psyche cannot be separated from soma. What is achieved, however, is a devastating surgery of usefulness: his effectiveness as a doctor is cut in half.

Health lies in "wholeness" and not in fragmenting the human organism, the human personality nor the human experience.

What are we trying to do for better mental health in Georgia and why is the medical doctor needed?

The American Medical Association has officially recognized mental illness as "America's most pressing and complex health problem." So it is a health problem and therefore cannot be ignored by doctors; and it is a problem of enormous magnitude and compelling urgency and, therefore, continued neglect is unthinkable. And curiously enough, doctors and hospitals are up to their necks in the problem however hard they might wish to block it off.

Acknowledgment of the Problem

But the Mental Health Association wants the doctors, individually, to acknowledge the problem, face up to it and take the leadership role in combating and preventing mental illness. Lay groups, no matter how dedicated, determined and persistent cannot successfully consummate a program in health without the leadership of doctors.

The doctor has two roles to play: his individual professional role as a physician, and his role in the community and state as a leader and authority in matters of health and disease.

Mr. Smith is a former President and Executive Director of, and is now Consultant to the Georgia Association for Mental Health.

In his individual professional role, the physician is our first line of defense against mental illness. He sees the patient first and should be competent to treat successfully the majority of troubled people who come to him for help. He should be quick, as he would be in surgical matters, to recognize types of psychological illnesses beyond his competency and which require the services of a specialist in psychiatry. This strong first line of defense would preclude the need for hospitalization in countless instances thus saving time, money and unnecessary suffering. Without this strong first line of defense, the fight against mental illness will remain disorganized and largely ineffective.

Desperate Need

The medical doctor is desperately needed as a leader in planning for a long range mental health program in Georgia. Such planning must recognize the stark facts of unprecedented technological change, population explosion, increasing and almost terrifying mobility of people, unanchored values and ideals, all accompanied by a galaxy of free floating anxieties.

In planning, prime consideration must be given to the unmet psychological needs of people. Treatment facilities should be planned which meet total psychological needs during crisis periods and such facilities should be near the people and available to all people as needed. Treatment facilities, however, must be regarded as only one part of a total mental health program. The potential strengths of the family, the most important unit in our society, must be recognized, developed and utilized. The total professional resources of the community must be oriented and motivated for constant effort. Community attitudes toward mental illness must be changed so that acceptance and personal concern will replace rejection. Do we not look to the physician as the natural leader in this type of activity?

Valid Focus

The only valid focus for a mental health program is the community. The acceptance by community leadership of this responsibility is the sine qua non of further progress in care and treatment of the mentally ill, in prevention of mental illness and in developing a climate conducive to good mental health. The physician ranks high in community leadership.

Many physicians are deeply concerned and valiantly active but these are as yet in the minority. To the profession as a whole in Georgia our plea is simply this: "We need your leadership in this crucial fight against mental illness."

Henry Grady Building

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

NEW DIRECTOR NAMED FOR GEORGIA PUBLIC HEALTH LABORATORIES

A new director for the Georgia Department of Public Health Laboratories Branch has recently been named. Earl E. Long, formerly director of the Health Department Central Laboratory Service, has assumed his new position as director of the Laboratory Branch following the retirement of Dr. Earl J. Sunkes.

Ohio Native

Long has been with the State Health Department since July, 1961. He is a native of Akron, Ohio, where he was graduated from Akron University. Following graduate work in medical bacteriology at the University of Pennsylvania, he served for 12 years as Director of Laboratories in the Akron Health Department. During World War II he directed a field hospital in the South Pacific as a member of the U. S. Medical Corps.

The Laboratory Branch which is now under Long's direction participates in the development, evaluation and coordination of programs in Health Department laboratories in Atlanta and over the state. Diagnostic and other public health laboratory services are provided by the Branch.

WORLD'S FAIR TICKETS AVAILABLE TO DOCTORS AT DISCOUNT RATES

The United States Committee, Inc. of the World Medical Association has available discount tickets to the 1964-65 World's Fair in New York City for doctors and their families from now until February 29, 1964.

Special rates for advance tickets are $1.50 for adults and $.75 for children, ages two through 12. These prices contrast to the regular $2.00 and $1.00 gate admission which will be charged once the Fair opens in April, 1964. There are no season tickets and an admission ticket is required for each visit. Advance tickets are good for any day during the two years that the Fair will be open.

An estimated 96 hours will be needed to see the entire Exposition. Doctors are reminded that the American Medical Association will hold its Annual Meeting in New York City in June, 1965.

When ordering, please specify the number of adult and children's tickets desired. Orders will be filled only if accompanied by check made out to: W.M.A., U.S. Committee, Inc. The address is 10 Columbus Circle. New York, N.Y.

BOOKS RECEIVED

Ciba Foundation Study Group No. 15, THE PATHOGENESIS OF LEPROSY, Little, Brown & Co., Boston, 1963, 101 pp., $2.95.

A Ciba Foundation Volume Edited by Gordon Wolstenholme, MAN AND HIS FUTURE, Little, Brown & Co., Boston, 1963, 410 pp., $6.00.

Laughlin, Henry P., MENTAL MECHANISMS, Butterworth, Inc., Washington, D. C., 1963, 272 pp., $7.50.

Greenblatt, Robert B., M.D., THE HIRSUTE FEMALE, Charles C. Thomas, Springfield, Illinois, 1963, 313 pp.

Mainland, Donald, M.D., ELEMENTARY MEDICAL STATISTICS, Second Edition, W. B. Saunders Co., Philadelphia, 1962, 381 pp., $9.00.

HANDBOOK OF PHYSIOLOGY, Section 2, CIRCULATION, Vol. II, American Physiology Society, Washington, D. C., The Williams and Wilkins Co., Baltimore, Md., 1963, 1786 pp., $32.00.

Medical Department, United States Army, SURGERY IN WORLD WAR II, Thoracic Surgery, Vol. I, Office of the Surgeon General Dept. of the Army, Washington, D. C., 1963.

REVIEWS

This is a splendid volume and is certainly one that all surgeons, whether they do thoracic surgery or not, should have a copy of available. With such authorities as Frank B. Berry, Brian Blades, Lyman Brewer, Thomas H. Burford, B. Nolan Carter, Michael DeBakey, Ernest Doud and Dwight Emory Hawkins writing in this volume there are many parts of wisdom in the management of emergency chest problems. Dr. Berry's chapters on the Historical Note and General Consideration of Thoracic Wounds alone will make the volume worthwhile. The chapter on reconditioning and rehabilitation is a splendid one and includes pictorial guides to exercises that everyone who does any surgery pertaining to the thorax should be familiar with. This is an aspect which is often deemphasized in the postoperative management of surgical patients and one that certainly needs re-emphasis. This book is filled throughout with excellent suggestions and techniques in the management of the severely wounded chest patient and there is a distillate of pure gold from most of the chapters written by the above listed eminent authorities who have contributed to this volume. I enthusiastically endorse it and recommend that it be on every surgeon's book shelf.

Robert H. Vaughn, M.D.

Robert Tauber, M.D., KEYS TO SUCCESSFUL SURGERY, Frederick Ungar Publishing Company, 1963.

The author, with a superb background of technical training, has obviously maintained the skilled student's interest in improving standardized methods. In addition, he has brought innovations to the fore that have been proven to surpass technics so familiar to many of us.

His book is unique in its presentation of its facing page format, with a brief description of a technical step, opposite a large, clear illustration. Subsequent to the development of various basic technical elements, they are in turn developed through multiple operative procedures. Readability is easy. A very satisfactory bibliography and index are present.

Both the student and the accomplished practitioner will enjoy and obtain value from this text.

P. C. Shea, Jr., M.D.

Ryan, Thornell, and von Leden, SYNOPSIS OF EAR, NOSE, AND THROAT DISEASES, The C. V. Mosby Co., St. Louis, Mo., 1963, 425 pp., $7.50.

This compact but comprehensive little book is written in collaboration by three relatively young men. All have had excellent training and have teaching connections with medical schools in their communities. It presents very clearly and concisely modern thinking in Otolaryngology. The authors give in sufficient detail that treatment of the various diseases which has given best results in their hands. If there is a difference of opinion of any consequence in diagnosis and treatment, the other viewpoints are given. As stated in the preface it is written primarily for the family physician and intern and should be a welcome addition to the reference library of both. The adequate index and the summaries at the end of each chapter make it an unusually good book for quick reference in office practice.

Taylor S. Burgess, M.D.

Cecil-Loeb TEXTBOOK OF MEDICINE.

The eleventh edition of the *Cecil-Loeb Textbook of Medicine* is edited by Dr. Paul B. Beeson, Professor of Medicine at Yale, and Dr. Walsh McDermott, of Cornell University. The new editors have continued the effective formula of previous editions, by presenting five associate editors and 165 contributors, each writing sections on subjects about which he or she has expert knowledge and experience.

Included in the text is much information that is new. There is a chapter by Alexander G. Bearn which gives a clear and concise introduction to genetic principles. The section on viral diseases has been expanded and includes good chapters about many of the more recently described viral entities. There are timely discussions of such topics as radiation injury, medical problems of air travel, high altitude sickness, decompression sickness, and even "Thalidomide embryopathy."

There is a completely new presentation of disease of the blood, this section having been reorganized by Dr. Carl V. Moore. The section on Diseases of the Digestive System has also been rearranged, with emphasis on disturbed physiology, as exemplified by chapter titles of "Disorders of Motility," "Acid-peptic Disease," and "Diseases of Malabsorption."

The eleventh edition of this medical textbook is in every respect a worthy successor to the previous editions, all of which have enjoyed universal popularity. This would be a valuable addition to the list of actively used books of any medical student or physician in any part of the world.

Henry H. Tift, M.D.

Grigor'eva, T. A., THE INNERVATION OF BLOOD VESSELS. Pergamon Press, New York, N. Y., 1962, 442 pp., $9.00.

This book by a leading Russian neurohistologist is an exhaustive compilation of morphologic information, principally of European origin, about the nervous supply of blood vessels. She has eight references dating back from 1840 to 1850, and 75 before the turn of the century. The largest single year is 1951 with 43, but there are only three references after 1954. These figures are given to show the completeness of this work but they also point up its shortcoming — the dearth of information utilizing techniques developed in the 1950's.

Because of the enormous amount of morphologic detail and the relative lack of normal or pathologic physiology, this book can be recommended only to neurohistologists who, if they are worth their salt, should know most of this material as well as the advances in this field in the last ten years.

Nicholas E. Davies, M.D.

Members of the Sections of Neurology and Section of Physiology, Mayo Clinic and Mayo Foundation for Medical Education and Research; Graduate School, University of Minnesota, Rochester, Minnesota. CLINICAL EXAMINATIONS IN NEUROLOGY, Second Edition, W. B. Saunders Co., Philadelphia, 1963, 396 pp., $8.50.

This second edition expands and brings up to date the principles involved in taking a good neurologic history and performing a meaningful neurologic examination. This volume also includes material not discussed in the first edition, namely: neuroradiologic techniques. More attention is also given to the neurologic findings peculiar to infancy which were very briefly mentioned in the initial volume.

Several chapters are most informative, as well as helpful. This especially applies to the section devoted to neuroophthalmology. This chapter and the one delineating muscle function are diagnostic jewels. For the individual poorly oriented in special techniques, the sections on electroencephalography and electromyography are of immense help in understanding these procedures better. Also, the reader will gain some insight as to the limitations and capabilities of these particular diagnostic aids.

For one with a meager background in neurology, this book proves most helpful, not only for review but also to perform and interpret an adequate neurologic examination. It furnishes a sound approach to understanding the central and peripheral nervous system. For one who sees only an occasional neurologic disorder this volume can unravel and simply explain involved and baffling neurologic diseases.

Robert F. Mabon, M.D.

Heaton, Lieutenant General Leonard D., The Surgeon General, United States Army, and Coates, Colonel John Boyd, Jr., MC, USA, INTERNAL MEDICINE IN WORLD WAR II, VOL. II, INFECTIOUS DISEASES, Office of The Surgeon General, Department of the Army, Washington, D. C., 1963, 649 pp., $6.75.

This is the second book dealing with the history of Internal Medicine in World War II. The first volume had largely to do with organizational problems. Volume II deals with the various infectious diseases encountered all over the world. A third volume now under preparation will include clinical descriptions of more general medical problems. These articles are prepared by the various medical officers who actually dealt with the problems. The clinical descriptions of disease entities and methods of treatment are interesting and well presented by outstanding authorities in each field.

Most of us remember our wartime experiences with mixed feelings. This is a nice nostalgic review and enables one to almost see the "big picture." It is a fascinating fact that in World War II, for the first time in the history of the world, fewer troops died of disease than of battle injuries and wounds. In the Civil War among Union troops 225,000 died of disease out of a total 360,000 deaths. Among the Confederate troops it was estimated that of the total 200,000 deaths, 150,000 were due to disease processes. I think from these figures it is obvious that the Medical Corps in World War II did a tremendous job and, in fact, had it not been for such medical care we might not have won at all. I am sure other branches of the service feel the same way about the overall situation but this volume is a nice reference work and is interesting to refresh your mind on the medical problems encountered in that great conflict.

Charles F. Stone, Jr., M.D.

THE PLIGHT OF THE CLINICAL INVESTIGATOR

Several sets of (new drug) regulations promulgated by the Food and Drug Administration . . . in some instances have actually gone beyond the intent of Congress. Probably the most crippling of these have been the clinical regulations which took effect February 7, 1963. Spawned at the height of the thalidomide crisis, they place unreasonable burdens on manufacturers and clinical investigators alike. Investigators must now file lengthy federal forms before they can undertake clinical work. The design of the experiment must be approved by the government, and no departures are permitted unless special permission is secured. Lengthy and expensive animal testing is required, and no drug can be administered to humans before such testing is completed. The Food and Drug Administration must be kept informed at all stages of the experiment at any time. The patient's consent must be secured for the administration of an investigational drug except where, in the judgment of a physician, it would not be feasible. —C. Joseph Stetler, Executive Vice President and General Counsel, Pharmaceutical Manufacturers Association, to 31st Annual Assembly of the Omaha Mid-West Clinical Society, Omaha, Nebraska, October 31, 1963.

DEATHS

ADDISON WINGFIELD SIMPSON, SR., 87, died at his home in Washington, Georgia, November 12, after several years of declining health.

He practiced medicine in Washington and Wilkes County for approximately 60 years. He was educated at Presbyterian College, Georgia Medical College at Emory University and graduated in 1898.

He interned at Grady Hospital and St. Joseph's Hospital and did postgraduate study in the New York Poly Clinic.

He was instrumental in organizing the Washington Hospital and organized the Wilkes County Medical Society. He was a member and past president of the Tenth District Medical Society; the Wilkes County Board of Health and the Board of Education.

Dr. Simpson was a charter member and past president of the Washington Kiwanis Club, member of the city council for 12 years and for 40 years he was team physician of the Wilkes County High School Athletic Association.

He was an elder in the Presbyterian Church and a member of Lafayette Lodge No. 23 and Columbian Chapter No. 136.

Survivors include three sons, Dr. Albert Simpson, Montgomery, Ala., Dr. Addison Simpson, Jr., Washington, and Graham T. Simpson, Ft. Lauderdale, Fla.; a daughter, Mrs. Garland Holloman, New Albany, Miss.; seven grandchildren and two great-grandchildren.

ED W. WATKINS, veteran Ellijay physician, died October 30, at his home after an extended illness. He was 87 years old.

Dr. Watkins practiced medicine in Ellijay for 37 years before he retired in 1957. The Medical Association of Georgia awarded him a 50-year service citation in 1950.

A Methodist, he was interested in all activities of the church which he served in various capacities. His contribution made possible a new building at the Methodist church which was renamed Watkins Memorial in memory of his parents and family.

He contributed $50,000 toward construction of the hospital at Ellijay which also was named for his family. He made liberal donations to colleges and schools, and was a trustee of Reinhardt College.

Survivors include his wife, the former Miss Bessie McLeod of Thomasville, Ga.; two nephews and a niece.

C. E. STAPLETON, 83, died unexpectedly at his Statesboro home November 10.

A native of Jefferson County, he had lived in Bulloch County since 1888, and had been practicing medicine since 1906. He was a member of the First Methodist Church in Statesboro.

Survivors are his wife, Mrs. Leola Lee Stapleton of Statesboro; a daughter, Mrs. Wendell O'Millian of Savannah; two sons, Col. Cyril D. Stapleton of the U.S. Army in Washington, D.C., Eldred W. Stapleton of Summerville, S. C.; three sisters, Mrs. Guy Woodward of Savannah, Mrs. Frank Woodward of Brooklet, Mrs. R. L. Whitehead of Lawrenceville; six grandchildren; three great-nieces and nephews.

ROBERT CLARENCE MONTGOMERY of Butler died at Piedmont Hospital, Atlanta, November 10, after a brief illness.

Born in Marion County, October 4, 1890, he spent most of his life in Taylor County. After graduation from the Medical School in Augusta, he established an office in Butler and several years later founded the Montgomery Hospital. He remained active in his medical practice until his death. He was a member of the Butler Methodist Church.

Survivors include his wife, Mrs. Anniera McLendon Montgomery; one son, Dr. R. Clifford Montgomery and one granddaughter, Miss Patricia Montgomery.

SOCIETIES

For their November meeting, the members of the CAMDEN-CHARLTON COUNTY MEDICAL SOCIETY and their wives were entertained at the home of Dr. and Mrs. A. J. Bauknecht in St. Marys. Guest speaker for the evening was Periodontist, Dr. Frank Scott of Jacksonville, Florida, whose discussion and slide illustrations of peridontal disease were well received.

THE SPALDING COUNTY MEDICAL SOCIETY served as host society for the fall meeting of the FOURTH DISTRICT MEDICAL SOCIETY. The program was a seminar on cardio-respiratory physiology and problems. Drs. Robert Ellison, Lois Ellison and Curtis Carter of the Medical College of Georgia presented a most interesting program during the afternoon. The evening program was a movie and slides on open cardiac surgery which was presented by Dr. Robert Ellison. Dr. Ricky Montero served as Program Chairman.

PERSONALS

The following names were inadvertently omitted when the December list of new Georgia Fellows of the American College of Surgeons was published:

Robins AFB
Ignatius J. Stein

Rome
A. Richard Gray

Savannah
Thomas A. Amburgey

First District

Appointment of MASON G. ROBERTSON of Savannah as Director of Medical Education at Memorial Hospital was announced November 9. Dr. Robertson replaces JAMES KEMP, who recently resigned to return to private practice in Ohio.

Second District

L. W. WILLIS, SR., Bainbridge physician, was pre-

sented a forty-year service pin November 11, by officials of the Atlantic Coast Line Railroad Company for his devoted service as local surgeon.

Third District

The Woman's Auxiliary to the Muscogee County Medical Society heard LUTHER WOLFF, Columbus, speak on legislation at its luncheon meeting held November 20 in Columbus.

Fourth District

J. W. CHAMBERS of LaGrange was the featured speaker at the Harwell Avenue PTA meeting held November 20 in LaGrange. Dr. Chambers, who was introduced by PTA President, EARLE E. LEWIS, spoke on socialized medicine and how it would affect children.

Fifth District

On November 16, JOHN T. GALAMBOS, Atlanta, participated in a postgraduate course held at Louisiana State University.

Three Atlanta doctors, MARY LOU APPLEWHITE, and SIDNEY and MARIAN OLANSKY recently attended the meeting of the Southern Medical Association held in New Orleans. Dr. Olansky was elected Secretary of the Dermatology Section of the SMA.

WILLIAM A. HOPKINS, Chief of cardiovascular and thoracic surgery at St. Joseph's Infirmary, Atlanta, presented, early in November, a seminar on surgery and congenital heart defects and open heart surgery at the University of Ecuador Medical School, Quito, Ecuador. He was the guest of the Dean of the medical school and Dr. Pablo Davilos, formerly of Atlanta.

J. WILLIS HURST, R. BRUCE LOGUE, R. C. SCHLANT, W. J. RAWLS, H. D. PROCTOR, A. PAULK, J. LINDSEY, J. BRAWNER, S. ELSON, C. COWAN, E. P. TUTTLE, J. SADLER, J. VAN BUREN and M. ZIMMERMAN, Atlanta, attended the meetings of the American Heart Association in Los Angeles October 25-29. Participating in the programs were Dr. Hurst, Dr. Logue, Dr. Elson, Dr. Tuttle, Dr. Sadler and Dr. Zimmerman.

JULIUS WENGER, Atlanta, attended the meetings of the American Association for the Study of Liver Diseases and the VA Cooperative Study Group (Gastroenterology) in Chicago, October 31.

JAMES BRAWNER, visiting doctor from the Psychiatric Clinic of Grady Hospital, Atlanta, was guest speaker at the October meeting of the Jonesboro Junior High School PTA. He gave an informative discussion on the prevention of mental illness in the early teen years and showed a film to illustrate how parents can help.

ROBERT L. BROWN, Atlanta, attended the annual meeting of the American College of Surgeons in San Francisco, October 28-November 2. He was Chairman of a postgraduate course in cancer.

THOMAS SELLERS, DONALD MARTIN, DEAN ARTHUR P. RICHARDSON, and HARRY WILLIAMS, Atlanta, attended meetings of the Association of American Medical Colleges in Chicago October 25-29. Dr. Sellers reported on the National Conference on the Teaching of Infectious Disease in Medical Schools conducted by Emory and the C.D.C., and Dr. Martin described the new teaching aids library being compiled by the C.D.C. Dr. Martin also attended the Inter-science Conference on Antimicrobial Agents and Chemotherapy in Washington, D. C.

GEORGE A. WILLIAMS, IVAN BACKERMAN and WARREN A. SOMERLOT attended the American College of Obstetricians and Gynecologists in Washington, D. C., November 7-9. Dr. Williams was Chairman of one of the general sessions and Dr. Blackman and Dr. Somerlot spoke on "Methemoblobinemia and Megaloblastic Anemia in Twin Pregnancy."

The Section of Otolaryngology of the Southern Medical Association at its recent New Orleans meeting elected JAMES T. KING, Atlanta, as a member of the Executive Committee.

Sixth District

A. L. MAYES, JR. has recently opened an office at 2009 Vineville Avenue, Macon, where he will specialize in diseases of infants and children.

WILLIAM RAWLINGS, THOMAS W. GILMORE and DEAN L. HOLMES, Sandersville, moved their offices November 4 from Rawlings Clinic to the F. B. Rawlings Doctors Building.

Seventh District

No news submitted.

Eighth District

No news submitted.

Ninth District

No news submitted.

Tenth District

PERRY P. VOLPITTO, Professor and Chairman of the Department of Anesthesiology at the Medical College of Georgia, Augusta, was recently chosen as President-elect of the American Society of Anesthesiologists. Dr. Volpitto will head the 7,000 member society during the year beginning November, 1964.

"The nurse is indispensable in medicine, and the need for more members of the profession is acute," PRESTON ELLINGTON, President of the Richmond County Medical Society, Augusta, said November 8 when he addressed the closing banquet of the 56th annual convention of the Georgia State Nurses' Association.

An interim meeting of the Georgia Obstetrical and Gynecological Society was held November 8 and 9 in Augusta. The society comprises approximately 175 obstetricians, gynecologists and endocrinologists from all sections of the state.

ROBERT G. ELLISON, Professor of Surgery and Chief of Thoracic Surgery at the Medical College of Georgia, Augusta, is the new President of the Southern Thoracic Surgical Association. He was installed during the organization's tenth annual convention in San Antonio, Texas, November 22.

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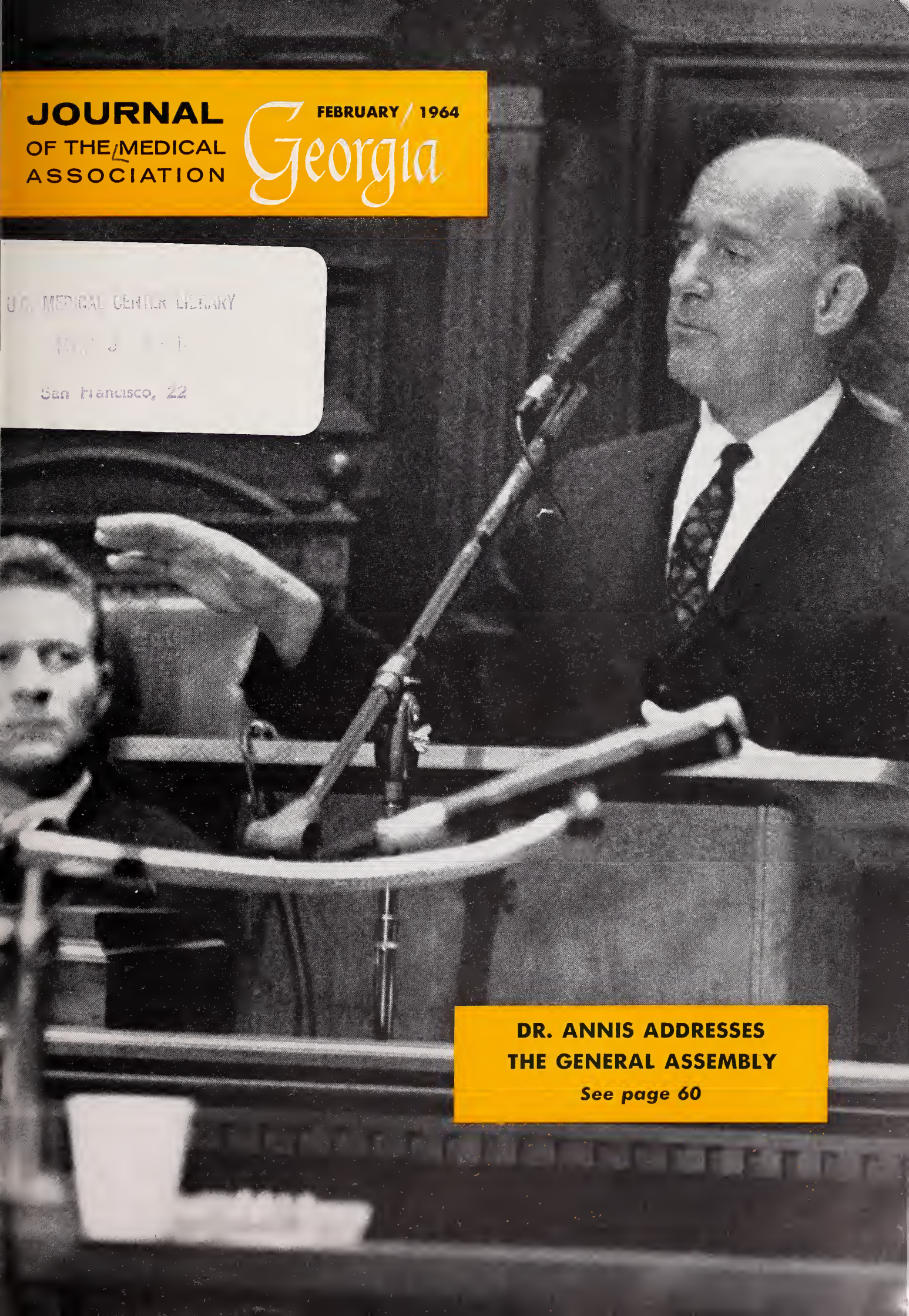

DR. ANNIS ADDRESSES THE GENERAL ASSEMBLY

See page 60

Helps to make the epileptic's life more meaningful

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PARKE-DAVIS

Effective in control of grand mal and psychomotor seizures, this agent enables the epileptic patient to lead a useful life.

Indications: Grand mal epilepsy and certain other convulsive states. **Precautions:** Toxic effects are infrequent: allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Eruptions then usually subside. Though mild and rarely an indication for stopping dosage, gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered, especially in children, adolescents, and young adults. During initial treatment, minor side effects may include gastric distress, nausea, weight loss, transient nervousness, sleeplessness, and a feeling of unsteadiness. All usually subside with continued use. Megaloblastic anemia has been reported. Nystagmus may develop. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. Periodic examination of the blood is advisable.

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit, Michigan 48232

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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

O\'ARIAN CANCER

Edgar D. Grady M.D.; Walter T. Sale, M.D., and
Luther C. Rollins, M.D., *Atlanta*

■ ***By the use of more aggressive methods of treatment, the authors report effective control of this neoplasm for prolonged periods.***

THE TREATMENT of ovarian cancer carries a special challenge today. Though a patient may seem to have hopeless cancer spread from her ovary, she may still have a good chance of salvage. We have learned, as have numerous others *(1, 2, 3, 12, 14, 15, 16, 17, 19)* that the combination of several therapeutic approaches has led, in a significant number of patients with such disease, to apparent control of the cancer.

Related Reports

Stone et al.[18] in 1963, studied the results of older accepted routines in 131 patients with ovarian cancer followed for five or more years through a New York medical college. He found that only 27 out of 131 patients (20.6%) had survived for five or more years. They concluded that these therapeutic results were no better than in past decades. This is in general agreement with a 1961 review from the National Cancer Institute[13] which reported a five-year survival rate of 23.8 per cent out of 6,697 cases of ovarian cancer.

It would appear from numerous reports describing recent developments in treatment of advanced stages of ovarian cancer, that there is a good reason to anticipate better results in coming decades. While surgical excision followed by external radiation for early ovarian cancer (stages I and II) has for a long time given good results, the late stages of this disease have not generally received a very aggressive approach. Nechaeva[14] from Russia described long remissions in 25 of 52 patients receiving radical surgery with thioTEPA. He also reported the use of X-ray therapy in some patients. In discussing this report, Elizarova reported that in 419 patients with stage III and IV ovarian cancer, radical surgery with omentectomy and thioTEPA gave best results. Schubert[17] in 1961 described treatment of 101 patients with ovarian cancer. Therapy was surgical whenever practical, with pre-operative radiation. Hormonal and chemotherapeutic agents were used adjunctively for prophylaxis, and in certain advanced cases antimetabolites, antimitotics, and antibiotics were used together. Combined therapy was found beneficial in advanced stages. He described two patients in which the above combined therapy was used in conjunction with intraperitoneal AU 198 with long periods of controls up to two years.

Combination Therapy

Greenspan et al.[12], from Mount Sinai Hospital in New York, described combination therapy in 35 patients with stage II, III, and IV ovarian cancer, followed ten days to two and a half years. He applied a priming dose of thioTEPA, 45—60 mg intramuscularly over three to eight days, and amethopterin 7.5—15 mg per day p.o. for five days or longer, until stomatitis developed. Amethopterin was given again after the third or fourth week with 20 to 25 per cent increase in the dose if the patient showed clinical regression and improved nutrition. ThioTEPA was resumed in the third week as a maintenance dose of 15 mg per week intramuscularly. Among 22 patients with stage III or IV with papillary cystadenocarcinoma, there were excellent results in 13, good in six, toxic death in two, and an equivocal result in one. There were two fair re-

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TABLE I

Stage I (12 Patients)		*Tumor limited to ovary, complete surgical removal.*
Patient No.	Procedure	Present Status and Course of Disease Since First Treatment
1 to 9	Surgery only	Well since 7 mos., 9 mos., 2 years. 1 mo., 4 yrs., 7 yrs., 8 yrs., and 9 yrs. Two patients not followed.
10	Surgery, Local Nitrogen Mustard	Well since 7 yrs.
11	Surgery, Systemic Chemotherapy, Cobalt irradiation (Tumor spilled)	Well since 1 yr. 1 mo.
12	Surgery, Intracavitary radium	Well since 5 yrs., though metastases.

sponses in anaplastic carcinoma. There were no good results in five patients with mucous cell adenocarcinoma nor in patients with malignant Brenner and pseudomucinous cystadenocarcinoma.

Bruhl[2] from Germany, reported that in eight patients with ovarian cancer treated postoperatively with Cytoxan, five of the eight were alive two and one half to four years after therapy. These contrasted with their usual mortality of 82 per cent in the first two years without chemotherapy. The usual routine in his hands is now Cytoxan (at least 15 gm) plus X-ray therapy postoperatively in all ovarian cancers except those with small stage I tumors.

Hospital Cases

The opportunity of working with many advanced cancers of various types has been presented to the authors of this report. Among these patients were several far advanced ovarian cancers. Our attempts to help these patients by palliative measures were encouraging. The principles of broad spectrum treatment sometimes used for palliation have been applied to some cases of invasive ovarian cancer for the initial treatment. It seemed appropriate at this stage to go back to the hospital records for analysis of what had been happening in local community hospitals, in order to have a base line for comparison. A total of 118 well-documented patients with ovarian cancer have been treated at Piedmont and Crawford W. Long Hospitals since 1949. Fourteen of these patients were lost to follow-up, leaving 104 cases to study. This study is presented first.

The pathology classification includes: pseudomucinous adenocarcinoma, unclassified adenocarcinoma, papillary adenocarcinoma, papillary cystadenocarcinoma, gonadoblastoma, granulosa cell carcinoma, dysgerminoma, and teratocarcinoma.

The disease was classified by stages as follows:

I. Tumor limited to ovary grossly, completely removed surgically, no evidence of micro-invasion.

II. Tumor showing break through capsule, grossly removed surgically.

IIs. Tumor confined to ovary but spilled during process of its dissection.

III. Tumor infiltrated other pelvic viscera, grossly limited to pelvis, surgically not completely removed.

IV. Tumor metastasized beyond the pelvis.

In the reports analyzed, the following methods of therapy were described: biopsy only (including paracentesis), biopsy with intraperitoneal nitrogen mustard, biopsy with intraperitoneal nitrogen mustard

TABLE II

Stage II (10 Patients)		*Tumor broken through capsule, grossly removed surgically.*
Patient No.	Procedure	Present Status and Course of Disease Since First Treatment
13 to 18	Surgery only	Two well for 5 and 10 yrs. Two died with metastases after 6 and 7 mos. Two were not followed.
19, 20	Surgery, Conventional X-ray	Well since 9 and 11 mos.
21	Surgery, Cobalt irradiation	Well since 2 yrs. 8 mos.
22	Surgery, Conventional X-ray Intracavitary radium	Died after 1 yr. 2 mos. from unknown cause.

TABLE III

Stage IIs (5 Patients)	*Tumor confined to ovary but spilled during dissection.*	
Patient No.	**Procedure**	**Present Status and Course of Disease Since First Treatment**
23, 24, 25	Surgery only	Well since 6 mos., 2 yrs. 5 mos., and 6 yrs.
26	Surgery, Conventional X-ray	Died after 1 yr.
27	Surgery, Conventional X-ray Local nitrogen mustard, Systemic chemotherapy	Survived 4 yrs.

and systemic chemotherapy, biopsy with systemic chemotherapy, each of above with conventional radiation, and each of above with cobalt radiation; surgical excision only, and surgical excision with radiation and chemotherapy combinations described above.

The results are listed in the following tables according to stage of the disease and method of therapy.

From these records it appears that the local methods of treatment are not consistent and that the results in general are no better than those reported by others, as shown in the previous paragraphs.

We have developed a more aggressive approach and believe that more patients may have their disease controlled for longer periods of time with the routine illustrated and summarized in the following paragraphs.

The methods of treatment that had been devised in general for advanced cancer have been applied by the authors *(4, 5, 6, 7, 8, 9, 10, 11)* to treat some cases of ovarian cancer. A few explanatory remarks can appropriately be made here concerning these methods.

1. Anti-cancer drugs with and after surgery are used: (a) systemically, to eliminate gross foci not removed by surgery, to eliminate cells in the blood

TABLE IV

Stage III (35 Patients)	*Tumor infiltrates other pelvic viscera, grossly limited to pelvis, not or not completely removed by surgery.*	
Patient No.	**Procedure**	**Present Status and Course of Disease Since First Treatment**
28 to 34	Biopsy only	Three died within 8 mos. Four not followed.
35 to 38	Biopsy, Conventional X-ray	All died within 10 mos.
39	Biopsy, Local nitrogen mustard	Died after 1 mo.
40	Biopsy, Nitrogen mustard, Systemic chemotherapy, Conventional X-ray	Not followed.
41 to 46	Surgery only	Two died post-op., two died after 2 yrs. 5 mos and 2 years. 6 mos., one is well after 2 yrs. 6 mos., one not followed.
47 to 53	Surgery, Conventional X-ray	Six well since 3, 5, 7, 8, 9, and 9 yrs. One died after 6 mos.
54 to 56	Surgery, Local nitrogen mustard	Two died after 5 and 18 mos. One not followed.
57 to 59	Surgery, X-ray Local nitrogen mustard	Two died after 1 yr. 3 mos. and 3 yrs. 1 mo. One not followed.
60	Surgery, Cobalt irradiation Local nitrogen mustard	Well since 1 yr. 2 mos.
61	Surgery, Local nitrogen mustard Systemic chemotherapy	Died after 8 mos.
62	Surgery, Local nitrogen mustard, Systemic chemotherapy, X-ray	Survived for 7 yrs.

TABLE V

Stage IV (56 Patients)		*Tumor has metastasized beyond pelvis*
Patient No.	Procedure	Present Status and Course of Disease Since First Treatment
63 to 66	Biopsy only	Three died within 3 mos., one survived for 3 yrs. but had multiple paracenteses for comfort.
67 to 75	Biopsy Conventional X-ray	Eight died within 4 mos. One died after 11 mos.
76, 77	Biopsy Cobalt irradiation	One died after 9 mos., one after 1 yr. 4 mos.
78	Biopsy Systemic chemotherapy	Died after 1 yr.
79 to 82	Biopsy, Local nitrogen mustard	All died within 9 mos.
83 to 86	Biopsy, Local nitrogen mustard, Conventional X-ray	One died after 3 mos., one after 8 mos., one after 1 yr., one not followed.
87	Biopsy, Local nitrogen mustard, Cobalt irradiation	Died after 5 mos.
88 to 93	Surgery only	One died post-op., two died after 6 and 7 mos., two lived for 2½ yrs. and 4 yrs., one not followed.
94 to 105	Surgery, Conventional X-ray	Four died after 2, 4, 5, and 7 mos., three lived for 2, 3, and 5 years. One is alive with disease after 2½ yrs., two are well since 1 yr. 4 mos., and 3 yrs. 5 mos., two not followed.
106 to 108	Surgery Cobalt irradiation	One died after 13 mos., two living with disease since 10 and 18 mos.
109	Surgery, Local radioactive gold	Alive with recurrent disease for 4 yrs.
110 to 113	Surgery, Local nitrogen mustard	One died after 5 mos., two lived for 1 yr. 6 mos. and 2 yrs. 7 mos., one not followed.
114 to 116	Surgery, Local nitrogen mustard, Cobalt irradiation	Lived for 1 yr. 2 mos., 2 yrs. 2 mos., and 4 yrs.
117, 118	Surgery, Local nitrogen mustard, X-ray, Systemic chemotherapy	Lived for 4 yrs. and for 4 yrs. 5 mos.

stream, and minute metastatic foci and (b) locally instilled into cavities, to eliminate superficial or free cancer cells.

2. A combination of several drugs of different types has been demonstrated both experimentally in animals and clinically by others and by the authors to be more effective than single drugs alone. In order to keep toxicity at a minimum, the dosage must be adjusted properly. Our routine has been thoroughly studied and simplified to combine 5-Fluorouracil, Cytoxan, and Methotrexate.[4]

In the hospital, a constant intravenous drip of 5-Fluorouracil is begun and continued for a week at a rate of 500-1000 mg daily. At the same time, 50—100 mg of Cytoxan and two and one half—five mg of Methotrexate are given by mouth. If the patient is progressing satisfactorily, she is sent home and therapy is continued on an out-patient basis. She continues to take her Cytoxan and Methotrexate by mouth and is given 500—1000 mg of 5-Fluorouracil intravenously with a rapid syringe injection twice a week according to her clinical condition and her blood count. Therapy consists usually of a one month's course but may be stopped early, or continued longer, or repeated at intervals for another month each time. Sometimes, later therapy may be more beneficial with entirely different drugs, like Velban or Actinomycin-D, etc., again according to the condition and response of the patient.

3. Internal radiation therapy with intra-arterially applied radioisotopes in particles offers certain advantages over other types of radiation. This method has been originated and developed by the present authors *(5, 6, 7, 8, 9)*. The goal of injecting radioisotopes in the treatment of cancer has been to localize the radiation in the disease without spreading it

elsewhere. Our method appears to have solved this problem in principle, but of course, there are many details of dosage and administration still to be studied. The radiation needs to be homogeneous throughout the tumor and not spotty. The dose needs to be appropriate to destroy the disease and not the normal tissue. These fundamental problems are inherent to all methods of radiation.

By making particles of insoluble radioisotopes just a little too big to pass through capillaries, and injecting such a suspension into an artery leading to the diseased tissue, the hot particles are homogeneously trapped in the capillary bed of the artery injected. Y-90, a pure beta emitter, which has an effective tissue penetration of 1.2 cm and a half life of 2.5 days, has been selected for use. The safety of its injection in most of the organs of the body (lung, kidney, liver, thigh, and brain) has been demonstrated by the authors in rabbits, dogs, and humans with advanced cancer *(5, 6, 7, 8, 9)*. For the treatment of ovarian cancer, a catheter is passed via a femoral arteriotomy or Seldinger needle with flexible wire guide to an appropriate point in the aorta, and its location is demonstrated by arteriogram. Its tip may be located above the celiac artery, above the superior mesenteric artery or just above the point of aortic bifurcation. Arterial tourniquets are then inflated around the upper thighs and left for ten minutes after the Y-90 is injected.

Illustrative Case Reports Treated by the Authors

Case No. 1. F. S.

In December, 1958, this acutely ill 64-year-old white female was first seen in consultation at Villa Rica Hospital, where she had been admitted three days after development of general peritonitis from what appeared to be rupture of some hollow viscous, apparently the appendix. Treatment was agreed upon as non-operative (for peritonitis) until her general condition improved.

On March 4, 1959, after what appeared to be maximum improvement on the non-operative routine, she was admitted to Crawford W. Long Hospital because of a residual 14 by 18 cm pelvic mass located in the right lower pelvis and fusing with the uterus. X-ray of the colon showed an extrinsic filling defect of the colon.

A laparotomy was done on March 10, 1959. In operation, there were found two right anterior masses containing cystic material. These were drained extra-peritoneally and thick white pus measuring about 500 cc was obtained. There remained a residual firm posterior right pelvic mass, from which a frozen section was obtained. Frozen section report was adenocarcinoma, site undetermined. The residual inflammatory and malignant masses involved attachments to the parietal peritoneum of the pelvis, the bladder wall, the uterus and the right tube and ovary, the cecum and appendix, and several loops of terminal ileum. Accordingly, an exenteration of the frozen mass was accomplished to include total uterus, both tubes and ovaries, three feet of terminal ileum, and five inches of cecum with appendix. In the process of dissection, the right ureter was identified and preserved. Ileo-ascending colostomy anastomosis was then made. The retro-pubic space was drained with a penrose drain. The patient tolerated the procedure fairly well. Twenty mg of nitrogen mustard was instilled into the peritoneal cavity at the end of the procedure via a polyethylene catheter that had been left in place.

The patient made a slow but uneventful recovery postoperatively and gradually returned to full activity. She was apparently free of disease in May, 1963, four years after operation. Final pathology diagnosis was papillary adenocarcinoma (mucous producing in the wall of the appendix with right perimetrial mass consistent with the origin in the right ovary).

Case No. 2. M. D.

This 54-year-old white female was seen by one of the authors in consultation at Piedmont Hospital five days after she had had a total hysterectomy with removal of ovaries and tubes for papillary adenocarcinoma of the right ovary. At the time of surgery, the ovary containing the tumor was apparently bound down, making dissection difficult, and obvious seeding and spilling at that time was reported. Because of the probable residual carcinoma, it was suggested that she have a course of chemotherapy and X-ray.

Since this was early in our experience with chemotherapy with 5-Fluorouracil, the routine of its application was considerably different from our present routine. She was treated with syringe injections of 5-Fluorouracil varying from 500 to 1000 mg daily, along with X-ray therapy begun on the third day of chemotherapy. The patient showed signs of severe toxicity from the chemotherapy with leukopenia, diarrhea, and ulceration of the mouth. She subsequently developed phlebitis, pulmonary embolus, and wound infection. In spite of all this, she recovered and completed her external cobalt therapy.

She did quite well thereafter, with full rehabilitation until January, 1963, at which time some areas of probable pulmonary metastases and a definite supraclavicular thickening were demonstrated. A scalene node on the left showed metastatic adenocarcinoma from the ovary. She then received an additional course of cobalt therapy to the area of

this metastasis and to the mediastinum with apparent control of any obvious disease.

Thereafter, she did have some persistent weakness and fever and was given another course of combined chemotherapy, this time including Cytoxan, Methotrexate, and 5-Fluorouracil for a month. Her symptoms have again subsided, and she at present shows no evidence of disease.

Case No. 3. P. W.

In October, 1961, this 46-year-old white female was first seen by one of the authors in consultation at Crawford W. Long Hospital for further therapy of recurrent papillary adenocarcinoma of the ovary. She had had a total hysterectomy with bilateral salpingo-oophrectomy two years earlier, followed by a full course of external radiation therapy. She had recurrent general abdominal masses with ascites in October, 1961.

Combined chemotherapy with 5-Fluorouracil, Cytoxan, and Methotrexate was instituted with temporary excellent control of disease without significant toxicity from the therapy. In May, however, the ascites and abdominal masses recurred. Again the same chemotherapy was given. The white blood count was maintained from 3000 to 4500 for four months. Improvement was definite, though intermittent diarrhea with occasional nausea was a frequent problem. During most of the time, she was up and about and comfortably managing her own household.

After a month of rest from chemotherapy, because of an enlarging pelvic mass, on October 10, 1962, the terminal aorta was cannulated via right femoral arteriotomy. Through this, 400 mc of Y-90 (large particle radioisotopes) were injected while arterial tourniquets were in place on the upper thighs.

There was an excellent concentration of radiation in the area of disease. Two weeks after therapy with Y-90, she developed intestinal obstruction obviously unrelated to the isotope therapy. Progressive weakness led to death on November 11, 1962.

Case No. 4. F. O.

On January 22, 1960, one of the authors was invited to assist in the operating room at Piedmont Hospital with the procedure already underway on this 63-year-old white female with extensive carcinoma originating in the ovary. Frozen section showed serous papillary carcinoma. The disease involved all of the pelvic organs, small bowel, and omentum. The gross pelvic disease was removed leaving the cervix in place, and a large mass of tumor involving six inches of small bowel and the omentum was excised. An end-to-end small bowel anastomosis was done. At the conclusion of the operation, ten mg of nitrogen mustard was placed within the peritoneal cavity through a polyethylene catheter.

Two days later, 5-Fluorouracil was begun intravenously, and six days after this, external cobalt therapy was begun. There was considerable toxic reaction of the bone marrow, but the patient survived the leukopenia and moderate diarrhea.

The disease seemed well controlled and the patient was rehabilitated until June, 1960. The pelvic mass that was found at that time gradually increased in size. On August 10, 1960, an isolation perfusion with dihydro-E-73 and nitrogen mustard was performed. There was a regression of the pelvic disease, and the patient was rehabilitated again to normal activity.

Three months later, more disease was palpable. By December, 1960, jaundice had developed. The patient was readmitted to the hospital for another course of chemotherapy, this time with 5-Fluorouracil, Cytoxan, and Methotrexate together. There was a rapid resolution of the jaundice and the palpable abdominal disease again disappeared. Rehabilitation was again complete with good comfort and return to normal household activity. By April, 1961, a pelvic mass was again palpable, this time only in the left pelvis and measuring about ten by 12 cm.

On April 6, 1961, a catheter was placed through the left femoral artery into the left common iliac artery and 100 mc of Y-90 radioisotopes were injected with a tourniquet on the left upper thigh. There was an excellent response which lasted for a year. By March, 1962, the pelvic mass reappeared and additional therapy was instituted with a catheter placed via the right femoral artery into the terminal aorta to give 290 mc of Yttrium-90. Tourniquets were placed on both upper thighs during the injection. The pelvic mass subsided, as it had done before. The patient has once more returned to normal activity.

Case No. 5. F. H.

This 75-year-old patient had inoperable general abdominal disease from papillary adenocarcinoma of the ovary. She had had a hysterectomy in 1925 for benign disease. Two years prior to admission to Piedmont Hospital, in 1960, a partial removal of a pelvic cancer had been done, and this had been followed by conventional X-ray therapy. Two weeks prior to admission to Piedmont, she had a repeat laparotomy elsewhere, and general carcinomatosis of the abdomen with involvement of the splenic flexure of the colon was found. Part of the major mass had been removed and ten mg of nitrogen mustard instilled into the peritoneal cavity.

Fifteen days after that procedure, under general anesthesia, a right femoral arteriotomy was done and a catheter was placed up into the aorta to a point just above the superior mesenteric artery. With arterial tourniquets on the thighs, 400 mc of Yttrium-90 particles were injected into the aorta.

An excellent concentration of the radiation was demonstrated in the area of the disease. Two days later, however, a massive pulmonary embolus developed, auricular fibrillation ensued, and pulmonary edema developed. In spite of all supportive measures and the use of Streptokinase activated fibrinolysin, hypotension and cardiac failure persisted. The patient expired on the tenth day after the embolus.

Case No. 6. E. R.

This patient had an incisional hernia through which a mass could be felt in the abdomen. On October 8, 1962, an exploratory laparotomy revealed a papillary adenocarcinoma of the ovary with implants in the small bowel and on the greater omentum. A radical excision of the ovaries was carried out with the adjacent peritoneal covering and a portion of the ileum and omentum which were involved. Obvious residual disease was left in place. At the time of surgery, ten mg of nitrogen mustard was instilled through a polyethylene catheter, and the wound was closed. The next day an additional dose of ten mg was administered through the same catheter which had been left in place.

Six weeks later, the patient was admitted to Piedmont Hospital for additional therapy. At this time a right femoral arteriotomy was done and a catheter was passed up to the abdominal aorta just above the inferior mesenteric artery, where 300 mc of Yttrium-90 particles were given with arterial tourniquets on the upper thighs. An excellent concentration of radiation was obtained throughout the abdomen and pelvis. The patient had the complication of cramping abdominal pain and bloody diarrhea about a month after the treatment. This was improved by the usual mucosal soothing and anticholinergic measures to control the diarrhea. All of these symptoms gradually subsided and the patient has returned to full activity with very little discomfort except an occasional loose stool. Recent examination showed no evidence of disease.

Case No. 7 M. B.

This patient was seen five days after her laparotomy for generally inoperable abdominal mass. Papillary adenocarcinoma arising in the ovary that had spread throughout the abdomen had been found and biopsied by removal of a large omental mass. On July 3, 1962, five days after the operation, 20 mg of nitrogen mustard was instilled via a polyethylene catheter introduced through a trocar. Four days later, she was begun on Cytoxan and Methotrexate and the next day constant intravenous 5-Fluorouracil was begun. Combined chemotherapy was continued on an out-patient basis intermittently for three months. On October 24, she was admitted to Piedmont Hospital and after two days of general support including blood transfusions, she was given 350 mc of Yttrium-90 particles through an aortic catheter placed just above the celiac artery, while arterial tourniquets were placed on the thighs. There was good localization of the radiation. Some general systemic reaction followed with diarrhea, nausea, vomiting, and dehydration. All of these symptoms gradually subsided within a week. By the time the radiation had expired (about three weeks after injection), abdominal examination failed to reveal any tumor mass and the patient was eating quite well. The tumor mass previously had extended to the umbilicus. There was, thereafter, a continuous sanguino purulent vaginal drainage, which we presumed was some degenerate tumor that had found a site of drainage through the vagina. However, as it was further evaluated, it proved to be degenerate lining of the uterus itself. On January 18, 1963, a D and C proved that there was only a small amount of decidua available and no tumor within the uterine cavity. There was, at this time, however, a recurrent mass about eight by 12 cm palpable in the pelvic area. The mass continued to enlarge, until the patient was readmitted to the hospital for consideration of further therapy. On April 10, 1963, after ureteral catheters had been placed, a laparotomy was done and an extensive pelvic clean-out was accomplished. The huge tumor mass, including six inches of rectosigmoid, both tubes, ovaries, and all of the uterus, was removed together with the pelvic floor. 1000 mg of 5-Fluorouracil were given intravenously during the procedure and repeated the next day. On the two subsequent days, 500 mg of 5-Fluorouracil were given intravenously daily. She developed infection of the lungs and general debility postoperatively. A fecal fistula appeared through the vagina and another through the abdominal wound. Her strength was gradually recovered in spite of the fistulae. The patient has returned home. Her fistulae have practically closed and she is having normal bowel movements below. No palpable mass or evidence of residual disease can be felt.

Case No. 8. A. B.

This 50-year-old white female had a mastectomy for breast cancer nine years previous to her admission to Piedmont Hospital on October 13, 1962, for a pelvic tumor. Papillary adenocarcinoma of the ovary had spread throughout the abdomen. Excision of the tumor mass was performed. This consisted

of the omentum, ovaries, tubes, and supracervical uterus together with large masses of tumor on the rectum, the bladder, and the left iliac vessels. Twenty mg of nitrogen mustard was left in the abdomen. The patient received 500 mg of 5-Fluorouracil during the procedure and daily intravenously for the next four days. Her white blood count dropped precipitously on the fifth day to about 2000. It promptly returned to 5000. On October 25, she was begun on Cytoxan, 50 mg twice a day, and Methotrexate, two and one half mg twice a day.

She was discharged from the hospital and continued on 5-Fluorouracil, Cytoxan, and Methotrexate as an out-patient. When this medication was completed and she had recovered for about a week from her chemotherapy, she was readmitted to the hospital. 255 mc of Yttrium-90 particles were injected into the terminal aorta by way of a femoral arteriotomy catheter. There was again some weakness with a little diarrhea. The radiation was quite well concentrated in the pelvic area. In follow-up as an outpatient, there seemed to be some residual firm thickening to the right and to the left in the pelvis and posterior to the cervical stump. There was no discrete mass except for a smooth nodule posterior to the cervical stump. She was given a course of external cobalt therapy without any further complication. At the time of the last examination, she had no evidence of residual disease, and she had returned to her normal functions.

Final Recommendations

After considering all methods of therapy available for ovarian cancer, the authors make the following recommendations:

Stage I.

Remove both ovaries and tubes and the entire uterus with cervix. At the same time, remove the omentum whether or not there is evidence of gross metastases. Follow surgery with a full course of external radiation to the pelvis.

Stage II and IIs.

Perform the same surgery as for stage I, e.g. total hysterectomy with bilateral salpingo—oopherectomy and removal of greater omentum. Instill ten-30 mg of nitrogen mustard (usually 20 mg) into peritoneal cavity immediately after surgery or on first or second postoperative day. Give a course of combined systemic chemotherapy for a month (Cytoxan, Methotrexate, and 5-Fluorouracil), beginning during the time of surgery and continuing *cautiously,* according to the condition of the patient. When the patient has completely recovered from the surgery and chemotherapy, give a full course of external radiation therapy.

Stage III.

Handle this case like stage II, except that intra-arterial large particle radioisotopes should also be used. When the patient has recovered from the initial surgery and chemotherapy, then she is readmitted to the hospital. Via a catheter passed from a femoral artery to the terminal aorta, eight mc of Yttrium-90 per kg of body weight are injected with arterial tourniquets inflated around the upper thighs. Two or three months later, external radiation may be added if the disease and condition of the patient seem to indicate it.

Stage IV.

In this case, chemotherapy with Cytoxan, Methotrexate, and 5-Fluorouracil for a month is frequently the first step, or it may follow laparotomy for only a biopsy. However, in some less extensive cases, definitive surgery to remove the bulk of the tumor masses may be the first step. Whether the more definitive surgery is the primary therapy or whether it is only possible after larger frozen masses are reduced by a preliminary course of chemotherapy, all resectable disease, including segments of severely involved small or large bowel, is removed. It does not seem advisable to remove the anus or the urinary bladder, when implants of tumor will be left behind elsewhere. Again, whether or not chemotherapy has been a preliminary step to shrink huge masses, 5-Fluorourical will be going intravenously during the surgery, and nitrogen mustard should also be inserted into the peritoneal cavity at the conclusion of the surgery or within 48 hours. Systemic 5-Fluorouracil, Cytoxan, and Methotrexate are continued *cautiously* for a month. As for stage III, as long as the disease is limited to the abdomen, intra-arterial Yttrium-90 radioisotopes, eight mc/kg, should be given when the patient has recovered from the surgery and chemotherapy. In these cases, the aortic catheter tip is located just above the highest artery going to the residual disease, e.g. superior mesenteric or celiac artery. Arterial tourniquets are placed on the upper thighs during and for ten minutes after the isotope injection. Usually in stage IV, external cobalt radiation should be added in full dosage two or three months after the radioisotopes have been given.

Conclusions

The results of treatment of ovarian cancer by various methods presented by numerous authors have been summarized. As a comparative series, we have classified the treatment and results for 118 cases of all stages of ovarian cancer as treated according to standard methods in the Crawford W.

Long and Piedmont Hospitals. We have developed some deviations from the standard older methods of surgery, chemotherapy, and radiation therapy. Bulky tumor masses are at least partly excised. Anti-cancer drugs are combined. A new intra-arterially applied beta radioisotope, Yttrium-90 particles, has been developed. Illustrative case reports are given in detail. By these more aggressive methods, many cases of previously unsalvageable cancers may have their disease controlled for long periods.

1938 Peachtree Road, N.W.

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CHROMOBLASTOMYCOSIS
(Verrucous Dermatitis)

Jack C. Norris, M.D., *Atlanta*

■ ***A case report of an extremely uncommon infection is presented.***

When I submitted the above title to the Secretary, I had not completely established the diagnosis of the lesion under consideration. However, now that the problem has been cleared up, I must ask forbearance with my duplicity. The condition at hand illustrates a disease about which we have scarce knowledge, and is rarely encountered in Georgia. Upon first glance at the patient's history, and the examined tissue, it was the impression that we were perhaps dealing with a soft tissue tumor, or an ulcerating epithelioma, with an added bit of caution that we might be encountering an infected melanocarcinoma.

Mr. D. A. Mc., as we shall designate him, was a 65-year-old white man, a farmer, in unusually good health. In October, 1961, he "skinned" his left hand accidentally; how, and on what, is not clear, near the base of his left smaller finger. In time, following that, he developed a "warty appearing growth" at the site of injury. Months later the lesion had increased in size, becoming very painful. Eventually secondary infection occurred with redness and swelling; pus could be expressed from it. Treatment at that period, wet dressings and penicillin, brought improvement, with sloughing, leaving a red ulcerated depression of a suspicious malignant looking type. Dr. R. B. Martin, III, the surgeon, therefore decided to remove the tumor, and under local anesthetic made an excision, closing the wound, placing the fingers in traction, and the hand in a cast. Surgery was performed in March, 1962. In May, 1962, the disease had cleared, and the patient apparently was cured.

Presented at the 109th Annual Session of the Medical Association of Georgia, May 6, 1963, Jekyll Island, Georgia.

Dr. Martin sent the specimen to me for a pathologic examination. It was described as being circular in character, measuring two to three cms in diameter, composed mostly of thick skin, having a brownish discoloration, a granular "warty" look, perhaps of a moth-eaten type, suspicious of infected ulcerating melanocarcinoma, but not by any means definitely so. However, I regarded the specimen with suspicion.

Characteristics

Microscopic examination made from several sections was of great interest, and I may add, confusing. It was characterized mostly by squamous hyperplasia, small concentric abscesses, fibroblastic and vascular proliferation, and intense inflammatory and round cell invasion, including scattered conspicuous giant cells. At that, we felt certain we were not dealing with sarcoma or melanoma. What then, was it? Several etiologic possibilities were explored: *Squamous ulcerative epithelioma; skin tuberculosis; Sarcoid, Hodgkin's disease, Leukemia, Xantho-endothelioma* or what not, or perhaps an unsual variety of subscute ulcerating granuloma. The inflammatory invasion and the giant cells were most intriguing, and in one section, I believed I could observe small cells that suggested some type of fungi. Eventually, I sent tissue to the Armed Forces Institute of Pathology in Washington, and thereafter received an illuminating report from Col. Frank Townsend, the director, of the examination of by Dr. Herbert Taylor, that stated "The lesion of the left hand is interpreted as *Chromoblastomycosis,* based upon the granulomatous infiltrate beneath pseudo-epitheliomatous hyperplasia, with giant cells, and a number of yeast-like organ-

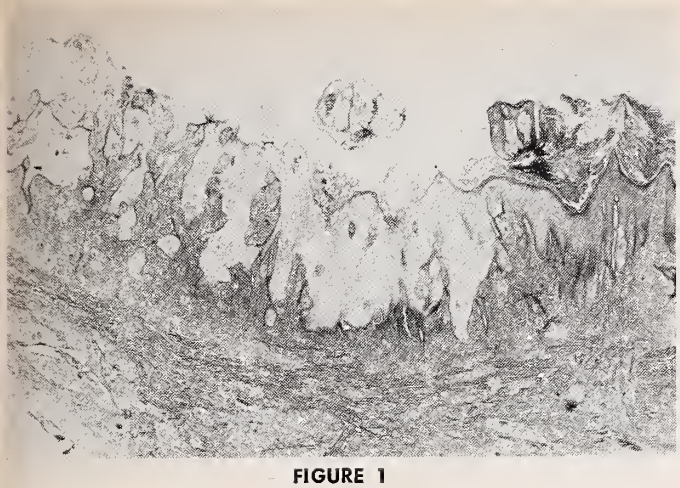

FIGURE 1
Showing general surface topography of lesion.

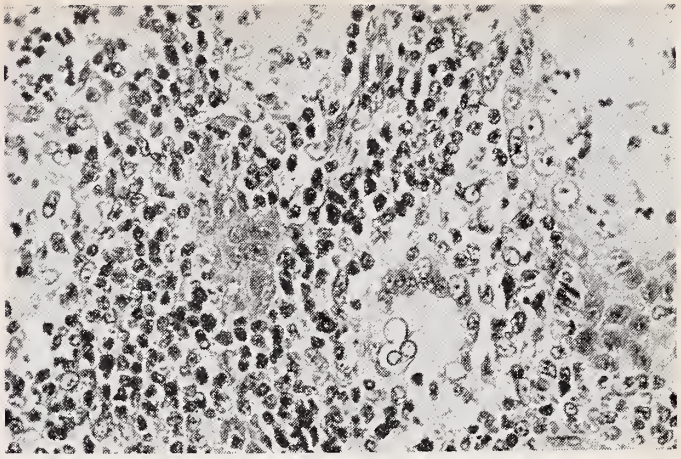

FIGURE 2
Showing inflammatory infiltrate, with giant cells, and Chromoblastomycetes as doubly contoured bodies in the cells.

isms with a golden brown pigmentation; organisms regarded as *Chromoblastomycetes.*"

After that report was made, there could be no doubt about the correctness of the diagnosis, and reexamination of the sections permitted us to recognize also the fungi, but I may add they were not numerous in number, and could have been overlooked had we not suspected their presence at the first examination.

A brief reference to the disease *Chromblastomycosis* is of considerable interest to me, and I hope shall be to others, not only because of the confusing masking histologic features, but also because of its rarity in the U. S. Many instances of the condition are probably overlooked and not recognized. If I have an excuse for missing this diagnosis, it is a weak one, for I saw another many years ago at Grady-Emory Hospital, confirmed by Dr. Fred Wiedmann, of Philadelphia, but had completely forgotten about it. The books reviewed state that *Chromoblastomycosis* is very rare in North America, and according to Conant, et al[1] in the *Manual of Clinical Mycology,* Saunders and Co., only 12, or possibly a few more cases have been found.

Verrucous Dermatitis

The malady is also known as *Verrucous Dermatitis,* largely because of the skin manifestations usually confined to the feet, legs, face, neck, shoulders and buttocks, and is caused by a variety of similar fungi under the broad class of Hormodendrum. Hematogenous spread may occur, bones can be invaded, but not lymphatics, and it takes years to metastasize as a rule. Primarily the lesion *Chromoblastomycosis* begins after some injury to the skin, such, perhaps, as the prick of a plant, or other accident which breaks the epithelium; and it begins as a *Warty,* or *Wart-like* growth. Gradually other areas become involved, and some patients show a considerable number of lesions, giving a rather ugly appearance to the areas affected.

Histopathologic review of tissue sections in Chromoblastomycosis, confirms the fact that the skin really is the site of the primary invasion, and the reactions in it are quite remarkable, of a very severe chronic papillary or verucoid granulomatous dermatitis. In the involved spots there is complete disorder from normal, with epithelial hyperplasia, scattered small abscesses packed with leucocytes, and giant cells of the Langhan's type. It is in this region that we encounter the blastomycetes, occasionally resting in the giant cells. Usually they appear to be small doubly contoured spherical bodies, single or multiple; frequently there are twins connected to each other, having equal sized bodies, or perhaps one that is smaller than the other, each with a chrome-like color, giving the distinctive name to the disease. The mycetes are believed to grow by dichotomous division, and by budding, although I am not sure this is true. They are exciting, exotic and very beautiful to note in hematoxylin and eosin mounts, and the chromogen appears to almost glow out in the surrounding cells. Elsewhere in the local spots, we find an intense round cell infiltration, somewhat suggestive of lymphoma, but here we can also observe plasma cells and eosinophiles. The marginal, more normal part of the bordering skin is thick, and almost keloidal due to fibroblastic proliferation and chronic repair, indicating a long standing resistant type of malady. Of significance, at least it was so to me, the epithelium in this condition, with the extensive hyperplasia, has numerous mitotic figures in the marginal rete cells, suggesting epitheliomatous degeneration; and if this is not an associated cancer, cancer is not far off.

It is generally understood that there is no sure cure for *Chromoblastomycosis.* Many drugs and chemicals have been tried, such as Potassium Iodide, or Sodium Iodide and Copper Sulfate, with various local applications, all to no avail.

The entity is more often diagnosed by either hydroxide smears of the secretion with inclusion of the mycetes, but better perhaps by culture and pathologic sections, and the golden appearance of the fungi. Bacteriologic methods are involved and tricky. Animal inoculations into skin of guinea pigs may bring an ulcer, with rather easy identification of the parasite.

A few remarks about the management of this case are also of great importance. Dr. Martin, being suspicious of malignancy because the lesion was so resistant, made an important decision when he decided to remove the lesion, and the surgery apparently cured the patient, preventing him from having a long train of misery and the worry of indifferent treatments, and saving the man's life. The malady certainly would have spread to vital organs eventually, leading to his death. Therefore, surgery, if used when the primary areas are removable, opens up a new field of therapy, and so proved to be sufficient in this instance. So far as I know now Mr. Mc has remained cured.

In conclusion, we have presented another instance of North American *Chromoblastomycosis,* so to add it to the other 12 or more cases that have been reported on this continent, and to encourage surgery as a new approach to curing a severely discouraging disease of an uncommon type.

490 Peachtree Street, N.E.

1964 CALENDAR OF MEETINGS

State

March 18-20—"Three Days of Advanced Electrocardiography and Vectorcardiography." Postgraduate course sponsored by the Department of Medicine, Emory University School of Medicine, Atlanta.

March 19-21—Annual Meeting of the Georgia Society of Ophthalmology and Otolaryngology, Callaway Gardens, Pine Mountain, Ga.

May 3-6—110th Annual Session of the Medical Association of Georgia, Macon, Ga.

Regional

February 29-March 5—International Academy of Proctology, Deauville Hotel, Miami Beach, Fla.

February 29-March 6—American College of Allergists, Americana Hotel, Bal Harbour, Fla.

March 1-6—American College of Allergists Graduate Instructional Course and 20th Annual Congress, The Americana, Bal Harbour, Miami Beach, Fla.

March 2-4—Symposium on Fundamental Cancer Research, Houston, Tex.

March 2-5—New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans, La.

March—Postgraduate Courses sponsored by the Department of Continuing Education of the University of Tennessee Medical Units: March 9-13—"Radiology;" March 19-21—"Surgery of the Hand;" March 25-27—"Obstetrics and Gynecology."

March 13-14—Fourth Annual Postgraduate Seminar in Arthritis and Related Diseases, sponsored by the Georgia and Florida Chapters of the Arthritis and Rheumatism Foundation, George Washington Hotel, Jacksonville, Fla.

March 14-21—Medical Students Aid Society, Diplomat Hotel, Hallandale, Fla.

March 16-19—American College of Surgeons (sectional meeting for surgeons and graduate nurses), Roosevelt and Jung Hotels, New Orleans, La.

March 21-28—Southeastern Surgical Congress, held aboard the S.S. Hanseatic. Cruise will begin March 21, sailing from Ft. Lauderdale, Fla. and returning to the same port on March 28. Stops to include St. Thomas, San Juan and Nassau.

April 1-3—American Surgical Association, The Homestead, Hot Springs, Va.

April 13-15—Association of Surgeons of Southern Railway System, Jack Tar Durham Hotel, Durham, N.C.

April 13-16—American Radium Society, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 15-18—West Virginia Academy of Ophthalmology and Otolaryngology, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 23-25—American Gastroenterological Association, Sheraton Hotel, Dallas, Tex.

April 27-28—Society of Head and Neck Surgeons, Peabody Hotel, Memphis, Tenn.

April 30-May 2—American Association for History of Medicine, Sheraton-Park Hotel, Washington, D.C.

May 17-22—American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour, Fla.

May 21-23—Eighth Biennial Cardiovascular Seminar sponsored by the Heart Association of Greater Miami, Carillon Hotel, Miami Beach, Fla.

May 25-27—American Gynecological Society, The Homestead, Hot Springs, Va.

May 28-30—American Ophthalmological Society, The Homestead, Hot Springs, Va.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, Calif.

March 16-28—Postgraduate Course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine.

April 11-16—American Academy of General Practice, Convention Hall, Atlantic City, N.J.

April 29-May 3—Student American Medical Association, Sherman House, Chicago, Ill.

June 21-25—American Medical Association Annual Meeting, San Francisco, Calif.

ECTOPIC PREGNANCY
A REVIEW OF 507 CASES

John C. Holley, Jr., M.D., *Atlanta*

■ ***This condition remains a significant gynecologic problem despite the tremendous amount of information which is known about it.***

ECTOPIC PREGNANCY is particularly a problem in the large charity hospital where the great majority of patients are seen initially by inexperienced personnel. Delays and errors in diagnosis are inevitable. In view of this we have reviewed all cases of ectopic pregnancy occurring in a ten-year period at Grady Memorial Hospital with the hope that exact knowledge of our experience would enable earlier and better management of the patient with an ectopic pregnancy.

Selection of Material and Method of Review

For the ten-year period from 1951 through 1961, 507 charts were available for review. Since 1954 all discharge diagnoses have been coded on IBM cards. Review of these cards made recovery of the charts an easy matter. For the years 1952 and 1953, a review of the pathology records which are filed under the code numbers of the Standard Nomenclature of Diseases and Operations disclosed the remainder of the charts for review. Due to omissions in coding, it is possible that not all the charts of patients who had ectopic pregnancies were found during the first two years of this review.

Each chart was reviewed and the information obtained transferred to IBM cards. After completion of the review, the results were tabulated and analyzed.

Incidence

During the period of this review there were 62,297 deliveries and 10,331 gynecologic admissions. The incidence of ectopic pregnancy was one in 123 deliveries and one in 20 gynecologic admissions. This is in keeping with the reported incidence. The distribution of cases and the incidences for each year are listed in Table I.

Race

86.6 per cent were Negro and 13.4 per cent were white. Approximately 80 per cent of the general hospital population is Negro and 20 per cent white.

Age

As would be expected, the highest incidence of ectopic pregnancy is found in women in their twenties and thirties, with most cases occurring in the 20-29 age group. The average age was 28. The youngest patient was 15 and the oldest was 44. Only 4.5 per cent of the patients were under age 20 and only 2.8 per cent were over age 40.

Previous Pregnancy

The average number of previous pregnancies was

TABLE I

Year	Number of Cases	Incidence Per Number Deliveries	Incidence Per Gyn Admissions
1952	23	240	34
1953	24	218	35
1954	35	163	27
1955	43	138	24
1956	65	95	15
1957	60	112	13
1958	58	117	16
1959	86	74	14
1960	74	90	18
1961	39	187	38
Total	507		

Presented at the 109th Annual Session of the Medical Association of Georgia, May 7, 1963, Jekyll Island, Georgia.

From the Department of Gynecology and Obstetrics, Emory University School of Medicine, and Grady Memorial Hospital.

TABLE II

Time Since Last Pregnancy	Number of Cases	Percentage
Less than 3 months	3	0.6
3 - 6 months	23	4.5
6 - 12 months	55	10.8
1 - 2 years	80	15.8
2 - 3 years	72	12.2
3 - 4 years	28	5.5
4 - 5 years	19	3.7
Over five years	140	27.6

2.8. The average number of previous abortions was 0.4. 6.30 per cent had had a previous ectopic pregnancy. This is much lower than the generally quoted incidence. 12.8 per cent had never been pregnant before.

Interval Since Last Pregnancy

Information concerning the time interval since the last pregnancy was available in 420 cases. The distribution is given in Table II. The fact that approximately one-third of the patients had not been pregnant for the preceding five years is probably a reflection of the relative infertility of the patient who develops an ectopic pregnancy. Only three patients or 0.6 per cent had a time interval of less than three months. The longest time interval from the previous pregnancy in this series was 24 years in two patients.

TABLE III

Symptom	Number of Cases	Percentage
Abdominal pain	493	99.2
Missed period	370	73.0
Spotting	255	50.3
Weakness	182	35.9
Nausea and vomiting	175	34.5
Fainting	173	34.1
Shoulder pain	95	18.7
Symptoms of pregnancy	78	15.4
Menometrorrhagia	59	11.6
Previous ectopic	32	6.3
Bowel movement pain	14	2.7
Back pain	7	1.4
Dyspareunia	0	0

Symptoms

In Table III, the recorded symptoms are listed in order of decreasing frequency. The classic symptoms of abdominal pain and a missed period predominate, closely followed by a history of irregular bleeding. Weakness and/or fainting was present in slightly over one-third of the patients. Nausea and vomiting not thought to be a presumptive symptom of pregnancy were also found frequently. It was not included unless it appeared during the present illness or its frequency and severity were recorded as having increased.

TABLE IV

Time From Last Normal Menstrual Period		
Interval	Number of Cases	Percentage
Less than 2 weeks	31	6.1
2 - 4 weeks	62	12.2
4 - 6 weeks	68	13.4
6 - 8 weeks	146	28.8
2 - 3 months	123	24.3
Over 3 months	65	12.8
Undetermined	12	2.4

Relation to Menses

39.4 per cent of the patients had missed one period and 23.3 per cent had missed two periods. 53.1 per cent of the patients dated the time from their last normal menstrual period as between six and 12 weeks. Table IV shows the relationship to the time of the last normal menstrual period.

TABLE V

Duration of Symptoms	Number Cases	Number with No Acute Symptoms	Percentage
1 day	151	0	32.6
2 days	83	0	17.9
3 days	19	0	4.1
4 days	26	0	5.6
5 days	16	0	3.5
6 days	10	0	2.1
7 days	27	0	5.8
1 - 2 weeks	74	1	15.8
3 - 4 weeks	43	5	8.2
1 - 2 months	18	4	3.5
More than 2 months	7	3	0.9
No acute symptoms	45	45	8.9

Duration of Symptoms

The duration of symptoms is shown in Table V. 50.5 per cent had had symptoms for two days or less in this series. 8.9 per cent of these patients had no acute symptoms at the time of diagnosis, although many had had symptoms for a varying period of time. Many had been sent home one or more times. Earlier diagnosis would probably have increased the number with no acute symptoms significantly.

Previous Gynecologic Disease or Procedure

Previous gynecologic disease was frequently found. Those diseases which were described in the history, but not confirmed were not included. The diagnosis of pelvic inflammatory disease was frequently found in the patient's record. However, due to the many difficulties in making this diagnosis, it was not included unless the following criteria were present, (1) a temperature over 101° and adnexal abnormalities in addition to tenderness, or (2) previous hospital admission for this diagnosis. Pelvic inflammatory disease was not included in the category of venereal disease due to the difficulties in establishing its exact etiology. Table VI lists the number and type of gynecologic disease found.

13.8 per cent of the patients had had previous venereal disease, usually sero-positive lues; however, all forms of venereal disease were present with the exception of granuloma inguinale. Combinations of venereal disease were frequent. The patients with Bartholin abscesses were not included in this category unless the gonococcus was isolated from the abscesses (one case).

Table VII lists the number of previous pelvic operations or procedures. None were listed if they were considered to be diagnostic procedures done in the process of making the diagnosis of ectopic

TABLE VI

Significant Previous Gynecologic Disease		
Disease	Number of Cases	Percentage
Venereal disease	70	13.8
Pelvic inflammatory disease	27	5.3
Septic abortion	17	3.4
Postpartum endometritis and/or parametritis	15	3.0
Bartholin abscess	9	1.8
Bartholin cyst	1	0.2
Myomata Uteri	10	2.0
Menstrual irregularity	9	1.8
Adnexal mass	4	0.8
Ca in situ of Cervix	3	0.6
Class III Pap	1	0.2
Hydatiform mole	1	0.2
Total	167	32.9

pregnancy. 14.6 per cent had had previous intra-abdominal surgery. Adhesions secondary to previous surgery have been considered to be etiological agents.

Vital Signs

Review of the vital signs of these patients was interesting. A complete listing of the findings of the temperature, pulse, and blood pressure appear in

TABLE VII

Previous Pelvic Procedures of Operations		
Procedure	Number of Cases	Percentage
Intra-abdominal Surgery	74	14.6
D & C	17	3.4
Endometrial Biopsy	3	0.6
Rubins Test	1	0.2
Hysterosalpingogram	1	0.2
Total	96	18.9

Table VIII. These findings suggest that shock as a presenting symptom is rare. No patient had an initial temperature over 103° F. and only 1.8 per cent of the patients had a temperature over 101° F., while almost 69 per cent were under 99° F. 55.8 per cent of the patients had a pulse under 100/minute, and only 18.3 per cent had a tachycardia over

TABLE VIII
VITAL SIGNS

	Number of Cases	Percentage
Temperature		
99[2] and under	346	68.2
99[3] - 100[9]	95	18.8
101 - 102[9]	9	1.8
103 - and over	0	0
Not recorded	57	11.0
Pulse		
Less than 60	5	1.0
60 - 79	40	7.9
80 - 99	238	46.9
100 - 119	128	25.2
120 - and over	93	18.3
Not recorded	3	0.6
Systolic Blood Pressure		
Less than 50 mm. Hg.	22	4.3
50 - 79	48	13.4
80 - 99	97	19.2
100 - 119	154	30.4
120 - and over	185	36.5
Not recorded	1	0.2

TABLE IX

Physical Findings	Number of Cases	Percentage
Abdominal tenderness	460	90.7
Rebound tenderness	352	69.4
Tenderness on motion of cervix	330	65.1
Bowel sounds present	286	56.4
Pallor	246	48.5
Unable to outline pelvic organs	235	46.4
Adnexal mass	195	38.4
Abdomen distended	175	34.5
Cul de sac bulge	122	24.0
Abdomen flat	87	17.2
Bowel sounds absent	58	11.4
Referred tenderness	36	7.1

120/minute. 66.9 per cent of the patients had a systolic blood pressure over 100 mm. of Hg.

Physical Examination

The physical findings in these cases are as listed in Table IX.

The classic findings of abdominal tenderness, pallor, and mass were very prominent. Also frequently found were rebound tenderness, cervical tenderness, and inability to outline the pelvic organs due to extreme tenderness. The discrepancy between the presence or absence of bowel sounds, and the presence or absence of abdominal distension is due to the fact that definite statements regarding these findings were not made on all charts.

Culdocentesis

Culdocentesis was performed on 321 patients. We have found this to be a very valuable diagnostic procedure, especially in the atypical case. Our results with culdocentesis are listed in Table X. No complications due to culdocentesis in this group of patients were found. In the five patients with false negative culdocenteses, it was not stated on the chart whether or not fluid was obtained. We do not feel that the failure to obtain any fluid on culdocentesis is of any significance in making or disproving the diagnosis of hematoperitoneum. It is usually due to technical difficulties, in that the cul-de-sac probably is not entered. Some of these culdocenteses were made in the early years when the procedure was being evaluated. Frequently, it was done prior to colpotomy or exploratory laparotomy. Of the positive aspirations, ten were not helpful in making

TABLE X

Culdocentesis Finding	Number of Cases	Per cent of those done
Clotting blood	4	1.2
Non-clottting blood	293	91.3
Clear fluid	6	1.9
Other fluid	0	0.0
Dry tap	9	2.8
False negative	5	1.6
Negative or non-clotting blood	2	0.6
Undetermined	2	0.6
Not done	186	
Total	507	

TABLE XI

Number of Outpatient Visits Prior to Diagnosis		
Number of Visits	Number of Cases	Per cent of Cases
0	277	54.9
1	107	21.2
2	48	9.5
3	31	6.1
4	17	3.4
5	9	1.8
6	8	1.6
7	3	0.6
8	2	0.4
9	1	0.2
10	2	0.4
Over 10	1	0.2

the diagnosis since they were done incidentally just prior to an operative procedure.

Delay in Diagnosis

The problem of delay in diagnosis was approached in the following manner. The number of visits during the present illness was determined. Also the reviewer objectively recorded his opinion as to whether a delay in diagnosis occurred. It was thought possible for a patient to make one or more visits during the prodromal phases of ectopic pregnancy and yet no real delay in diagnosis occurs. Delay in diagnosis, as judged by the reviewer, occurred in 47.3 per cent of the patients while 45.1 per cent of the patients made one or more visits prior to correct diagnosis.

Laboratory Findings

During the earlier years, the hemoglobin level was used as the determination of the degree of anemia. In the latter years, the hematocrit was used. In some instances, both determinations were done. 54.2 per cent of the patients had hemoglobin determinations, and 65.5 per cent of the patients had hematocrit determinations. A hematocrit of 30 vol. per cent and a hemoglobin value of ten gms are accepted as very common values in the general hospital population. 57.4 per cent of the patients tested had hematocrit values over 30 vol. per cent and 42.2 per cent had a hemoglobin value over ten gms. Severe anemia as manifested by these determinations was rare. Only six per cent had a hematocrit below 20 vol. per cent and only 7.3 per cent had a hemoglobin value below 6.1 gms.

The postoperative hematocrit values would seem to indicate that blood replacement was adequate. Only 10.5 per cent had a value under 30 vol. per cent.

31.4 per cent of the patients had a leukocyte count determined. 49.7 per cent of the patients had leukocyte counts under 10,000 mm^3, and 18.9 per cent had leukocyte counts over 15,000 mm^3.

Differential white blood cell counts were available in 17.6 per cent of the patients. The differential white blood cell count was shifted to the left in 60.7 per cent of the patients tested, but was thought to be of little value in diagnosis.

Pregnancy tests were done in 12.9 per cent of the patients. It was positive in 43 patients or 66.2 per cent of the total done, but directly led to the diagnosis in only 17 patients. Very frequently while awaiting the results, acute symptoms occurred making the diagnosis evident. In other cases, the positive frog test was ignored or thought to represent an intrauterine pregnancy.

X-rays of the abdomen were obtained in 10.1 per cent of the patients. A pelvic mass was noted in 29.4 per cent of the patients X-rayed. It is considered to be of little value in establishing a diagnosis of ectopic pregnancy, since frequently the diagnosis was made prior to considering the procedure.

Table XII shows our experience with these pro-

TABLE XII

Determination	Number of Cases	Percentage
Initial Hematocrit		
0 - 9	0	0.0
10 - 14	5	1.5
15 - 19	15	4.5
20 - 24	43	12.5
25 - 29	76	22.2
30 - 34	92	27.7
35 - 39	76	22.2
40 and over	25	7.5
Post Op Hematocrit		
0 - 9	0	0.0
10 - 14	0	0.0
15 - 19	0	0.0
20 - 24	10	2.6
25 - 29	30	7.9
30 - 34	127	33.6
35 - 39	127	33.6
40 and over	84	22.2
Hemaglobin		
0 - 2	0	0.0
2.1 - 4	7	2.6
4.1 - 6	13	4.7
6.1 - 8	60	21.8
8.1 - 10	80	29.1
10.1 - 12	81	29.8
12 and over	34	12.4
WBC		
5000 and below	9	5.7
5001 - 10,000	70	44.0
10,001 - 15,000	50	31.4
15,001 - 20,000	23	14.5
20,000 and over	7	4.4
Differential WBC Count		
Normal	34	38.2
To Left	54	60.7
To Right	1	1.1
Pregnancy Test		
Positive	43	66.2
Negative	19	29.2
Positive, then negative	3	4.6
Negative, then positive	0	0.0
Abdominal X-ray Finding		
Normal	27	52.9
Mass	15	29.4
Extrauterine pregnancy	4	7.8
Fetal Parts	3	5.9
Ilius	1	2.0
Homogeneous, hazy	1	2.0

cedures. All percentages in regard to laboratory findings are expressed in terms of the number of that procedure done.

Time Interval to Surgery

The diagnosis of ectopic pregnancy is generally considered as an indication for emergency surgery. For purposes of this review, the first recorded time on the patient's chart was used to calculate the time interval to surgery. In 86.6 per cent of the patients, this was the time the patient first applied for treatment, and not the time of admission to the hospital after the diagnosis was made. In only 1.6 per cent of the cases was the proper diagnosis made and the patient taken to surgery in less than one hour. 17.8 per cent reached surgery within three hours. 54.6 per cent of the patients reached surgery in from three to six hours. 15.2 per cent of the patients had a time interval to surgery greater than 24 hours.

Length of Hospitalization

The great majority of the patients were discharged on the sixth and seventh postoperative days. 61.5 per cent were discharged on these two days. 20.8 per cent were discharged during the second postoperative week, the majority of these being on the eighth and ninth postoperative day. One patient was in the hospital over four weeks after surgery due to acute cholecystitis which developed in the postoperative period. The shortest time interval after surgery was two days in two patients, both of whom had the ectopic removed through a colpotomy.

Type of Surgery

The type of surgery performed is listed in Table XIII. In recent years, salpingectomy with cornual resection has been the generally preferred procedure. Hysterectomy has been done when the uterus was hopelessly injured. In recent years, it has been done more frequently if sterilization was desired, or if sterilization would be accomplished by salpingectomy due to previous surgery on the opposite adnexa. Oophorectomy was done only when involvement of the ovary in the ectopic mass made its conservation impossible.

90.2 per cent of the laporotomies were done through a midline incision. This has been generally preferred over other incisions because of the greater speed with which it can be done. Paramedian incisions were done in 5.7 per cent and in only 3.2 per cent was a transverse or Pfannenstiel's incision elected. No postoperative hernias were noted in the entire series of patients. 6.1 per cent of the patients had incidental appendectomies without complications.

Blood Transfusion

Table XIV lists the number of transfusions required. The average number of transfusions was 2.7 units. A total of 1391 units of blood was administered with four blood reactions noted. Since most of these were administered under anesthesia, this may account for the low figure. Eleven per cent of the patients did not require transfusion.

TABLE XIII

Type of Surgery		
Procedure	Number of Cases	Percentage
Salpingectomy	482	95.0
Cornual resection	296	58.4
Oophorectomy	142	28.0
Total hysterectomy	48	9.5
Appendectomy	31	6.1
Colpotomy	17	3.3
Tubal ligation	11	2.2
D & C	10	2.0
Exp. Lap. erroneous Dx	8	1.6
Subtotal hysterectomy	4	0.8
Salpingostomy	3	0.6
Partial salpingectomy	1	0.2

Pathology

There was no significant difference between the left and right adnexa regarding the location of the ectopic. Of the recorded cases, 245 were in the left adnexa and 257 in the right adnexa. The others were unlisted. No bilateral ectopics occurred in this series. Combined abnexal and intrauterine pregnancies occurred in two cases. In one instance the patient aborted the intrauterine pregnancy the day prior to the day the diagnosis of ruptured ectopic was made. In the other case, the patient had her ruptured tubal ectopic removed, and then had an uneventful pregnancy and term delivery. 66.9 per cent were ruptured ectopics and 20.1 per cent were classified as tubal abortions. 4.5 per cent were unruptured. No patient was classified as having an unruptured ectopic if any blood was leaking from the wall or through the tube. The remainder of the cases were unlisted or were ectopics involving other organs. Two cases were considered to be primarily ovarian in location. Twelve were considered to be secondary abdominal pregnancies. 5.7 per cent of the cases were interstitual in location.

Table XV lists the microscopic pathology described in the pathology reports. In 459 cases or

TABLE XIV

TRANSFUSIONS		
Units Blood	Number of Cases	Percentage
0	56	11.0
1	80	15.8
2	97	19.1
3	98	19.5
4	93	18.3
5	45	8.9
6	25	5.0
7	5	1.0
8	7	1.4
9	0	0
10	0	0
Over 10	1	0.2

TABLE XV

Micrascapic Pathalogy		
Finding	Number of Cases	Percentage
Chorionic villi	445	87.8
Chranic salpingitis	22	4.3
Hematasalpinx withaut evidence of pregnancy	20	3.9
Decidual endametrium	22	4.3
Praliferative endametrium	1	0.2
Secretory endametrium	1	0.2
Premenstrual endametrium	1	0.2
Decidua in tube	6	1.2
Ca in situ cervix	5	1.0
Possible ca in situ cervix	1	0.2
Atypism R/a ca in situ cervix	1	0.2
Chranic and acute endometritis	2	0.4
Salpingitis isthimca nodosa	1	0.2
Tube not remarkable	1	0.2
Adenomyosis in cornual resection	1	0.2
T - O abscess	1	0.2
Cysts		
(a) corpus luteum	1	0.2
(b) palycystic ovary	1	0.2
(c) follicle cyst ovary	1	0.2
(d) T - O cyst	1	0.2
Not described or done	24	4.7

90.5 per cent the diagnosis was confirmed by the finding of chorionic villi or the presence of a fetus at the time of surgery. In the 48 unproven cases, the findings of a ruptured tube, or a sequence of clinical events left little doubt as to the correct diagnosis.

Table XVI lists the gross pathological findings other than ruptured salpinx or other evidence of ectopic pregnancy. The combination of chronic salpingitis, hydrosalpinx, multiple adhesions, clubbed tubes and nonpatent opposite tubes suggests a high percentage of previous pelvic inflammatory disease.

Complications

Table XVII lists the recorded complications. The most common complication was a temperature of 100¼ F. on two or more consecutive days. In many instances, a high febrile response was noted postoperatively.

Mortality

Death occurred in five cases, two prior to surgery, one during surgery, and two after surgery, giving a mortality rate of one per cent for the series and an operative mortality of 0.6 per cent. The causes of

TABLE XVI

Associated Gross Pelvic Pathology		
Findings	Number of Cases	Percentage
Fetus	152	28.0
Multiple adhesians	149	29.4
Hydrasalpinx	31	6.1
Ovarian cyst (great 3 cms)	30	5.9
Fibroids	26	5.1
Clubbed oppasite tube	6	1.2
Nanpatent appasite tube	1	0.2
Small hemorrhagic carpus luteum	1	0.2
Hematasalpinx, opposite site	1	0.2
Uncontrollable bleeding from cornual resectian leading to hysterectamy	1	0.2

TABLE XVII

Complications		
Complications	Number of Cases	Percentage
Marbid (100¼ on 2 days)	256	50.5
Atelectasis	18	3.6
GU infection	16	3.2
Waund infection	12	2.4
Waund dehiscence	7	1.4
Thrombophlebitis		
Leg	7	1.4
Arm	2	0.4
Paralytic ilius	9	1.8
Death	5	1.0
Pelvic cellulitis	3	0.6
Pneumonia	2	0.4
Pulmonary edema	2	0.4
Pulmonary embali	1	0.2
Intestinal obstruction	2	0.4
Laceration small bowel at surgery	2	0.4
Convulsions, post-op	2	0.4
Exploratory lap for post-op bleeding	1	
Incisianal hematama with spontaneous drainage	1	0.2
Skin bleeder requiring ligation	1	0.2
Secondary closure	1	0.2
Conjunctivitis post-op	1	0.2
Thrombosis retinal artery	1	0.2
Air embolism	1	0.2
Cardiac arrest	1	0.2
Cholecystitis (acute) during hospitalizatian	1	0.2

death prior to surgery were acute blood loss in one patient and air embolism due to transfusion under air pressure in the second case. The patient who died during surgery died of acute blood loss and cardiac arrest. Postoperatively one patient died with a clinical diagnosis of a pulmonary embolism on the fifth postoperative day. In the last case the cause of death was undetermined but was probably related to blood loss and the extensive surgery required; sigmoid colectomy, ileo-transverse colostomy, bilateral salpingo-oophorectomy, and two cutaneous colostomys.

Autopsy was not done in any of these cases, but pathological confirmation of the diagnosis was made in three cases. In the other two who died prior to surgery, both had a proven hamatoperitoneum by culdocentesis or paracentesis, and in one the clinical findings left little doubt as to the true diagnosis. The other case is included, since we cannot exclude ectopic pregnancy. A recent review of the records of the Fulton County coroner's office failed to reveal any other death which could be attributed to ectopic pregnancy.

Subsequent Pregnancy

The patient who has ectopic pregnancy has been considered to be a patient with relative infertility. After an ectopic pregnancy, unless the involved tube was preserved, one would expect a greater degree of infertility. Table XVIII lists the subsequent pregnancies in these women. 74.4 per cent of the reviewed cases have had no further recorded pregnancies. Only 17.8 per cent have delivered living children. 3.9 per cent have had subsequent ectopic

TABLE XVIII

Subsequent Pregnancy	Number of Cases	Percentage
None	378	74.4
Aborted	29	5.7
Ectopic	20	3.9
1 Child	51	10.1
2 Children	24	4.7
3 - 5 Children	14	2.8
Over 5 Children	1	0.2
Stillborn	2	0.4
Now Pregnant	7	1.4
Not Applicable (Death)	5	1.0

pregnancies and 5.7 per cent have aborted. Since essentially no other local facilities are available for the care of the indigent patient, we feel that few if any subsequent pregnancies are unknown to us. A few may have moved away.

Using the pregnancy rate as originally expressed by Pearl, the pregnancy rate for this group of patients is 33. A pregnancy rate of 60 to 80 is usually considered normal for patients using no contraception, according to Dubrow and Guttmacher. The incidence of contraception in our patients is unknown. It is thought to be low, but we are unable to document this. The above calculated pregnancy rate is compatible with the relative infertility in this group of patients.

Comment

Ectopic pregnancy remains a significant problem for the physician. It may manifest itself in many ways, and there is not an easy, completely reliable way to confirm the diagnosis in every case. It must be thought of constantly when seeing women in the reproductive age. In our experience, culdocentesis has been the most consistent aid in establishing the diagnosis, since the presence of non-clotting blood indicates surgery to control the bleeding. However, in nine per cent of our patients, culdocentesis did not reveal non-clotting blood, and it is in this group that confusion and delays in diagnosis occur. If ectopic pregnancy is suspected, despite a negative culdocentesis, further diagnostic procedures are indicated. These may be either culdoscopy or exploratory posterior colpotomy. These procedures have the advantage of enabling the operator to definitely establish whether or not an ectopic pregnancy is present. We have not had extensive experience with either of these procedures, but we are in the process of acquiring this. In a few cases exploratory laparotomy may be necessary to rule out the presence of an ectopic pregnancy. This should be an infrequent occurrence, and will arise only when difficulty is experienced in entering the cul-de-sac.

In too many cases the patient with an ectopic pregnancy is rushed to the operating room and a salpingectomy is done without proper regard to her need for future pregnancy. The infrequent occurrence of subsequent successful pregnancy in this study shows that more frequent use of salpingostomy, salpingotomy, and lysis of peri-tubal adhesions is indicated if the patient's condition permits.

TABLE XIX

Subsequent Pelvic Symptoms or Findings	Number of Cases	Percentage
Adnexal mass	18	3.6
Pelvic pain	17	3.3
Fibroids	15	3.0
P.I.D.	13	2.6
Menometrorrhagia	12	2.3
Pelvic relaxation with SUI	4	0.8
Ca in situ cervix	1	0.6
Amenorrhea	2	0.4
GU infection	2	0.4
Pyogenic granuloma cervix or vagina	2	0.4
KMn O_4 burn vagina	2	0.4
Bartholin abscess	1	0.2
Pelvic hematoma, 6 wks. post op.	1	0.2
Dysmenorrhea	1	0.2
Positive Rubins test at 184 mm. Hgb.	1	0.2
Observed in hospital for corpus luteum rupture 1960	1	0.2
Frigidity	1	0.2
Septic abortion	1	0.2
Hysterectomy, reason unknown	1	0.2
Hirsuitism	1	0.2
Exploratory tap for primary peritonitis	1	0.2
Pseudocyesis	1	0.2

Salpingectomy with cornual resection remains the most usually indicated operative procedure for the patient with an ectopic pregnancy. We have usually combined this with a modified Coffey suspension for reperitonealization.

Hysterectomy is occasionally indicated, and probably should be done if it is obvious that primary tubal surgery will make the patient sterile. The rationale is that this removes a useless organ, and may prevent future disease such as menstrual disturbances or uterine cancer. Controversy exists as to this point, but it is our opinion that hysterectomy is justified under these conditions.

Summary

1. A review of 507 patients with ectopic pregnancy has been presented.

2. Ectopic pregnancy remains a frequent and serious problem.

TABLE XX

Duration of followup	Number of Cases	Percentage
Not seen after surgery	40	7.9
Less than 6 weeks	155	30.6
6 weeks to 3 months	52	10.3
3 to 6 months	43	8.5
6 months to 1 year	57	11.2
1 to 2 years	52	10.3
2 to 3 years	29	5.7
3 to 4 years	29	5.7
4 to 5 years	10	2.0
Over 5 years	36	7.1
Not applicable (Death)	5	1.0

3. The more common symptoms, physical findings and related clinical data have been presented.

4. The need for more extensive use of culdoscopy and exploratory posterior colpotomy has been stressed.

5. The type of operative procedure has been discussed, with emphasis placed on the need for conservative or constructive tubal surgery in patients who desire further children.

6. Successful pregnancy after an ectopic pregnancy managed in the usual way appears to be uncommon.

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AMA ANNOUNCES MEDICAL JOURNALISM AWARD

The American Medical Association has announced a $5,000 medical journalism awards program "to recognize journalism that contributes to a better public understanding of medicine and health in the United States."

Awards of $1,000 each will be presented for outstanding reporting on health and medicine in five categories — newspapers, magazines, radio, television, and in newspaper editorial writing, said F. J. L. Blasingame, M.D., executive vice president of the AMA.

The awards are intended for recognition of outstanding reporting of the scientific and clinical aspects of medicine, Dr. Blasingame said. Awards will be presented for the first time in 1965, based on work published or broadcast during the calendar year of 1964.

To Be Judged

Entries will be judged on a basis of accuracy, significance, quality, public interest and impact. Entries will be judged by the 1964 Medical Journalism Awards Committee, which will include outstanding members of the publishing industry, radio and television industry and the medical profession, he said.

Entries may be sent to the 1964 Medical Journalism Awards Committee, American Medical Association, 535 N. Dearborn St., Chicago, Illinois. Deadline is February 1, 1965, although entries may be submitted at any time prior to that date.

Newspaper and magazine articles should be submitted in triplicate, validating date of publication and showing the material as it was presented to the public. Entries for radio or television should consist of three copies of the complete script and a 200-word summary of the script, together with film or kinescope of television entries and audio tape or transcription of radio entries. Entrants may make as many entries as they wish.

Each entry should be accompanied by a statement listing title of entry, writer or producer, publication in which the article appeared or station or network over which program was broadcast, date entry was published or broadcast, category for which entry is submitted, name, address and title of person submitting entry. Radio and television films, tapes or kinescopes will be returned if requested.

Categories of competition are:

1—NEWSPAPERS: For a distinguished example of a news or feature story or series in a United States newspaper of general circulation published daily, Sunday or at least once a week.

2—MAGAZINES: For a distinguished example of an article or series in a United States magazine of general circulation published weekly, monthly, quarterly or at other regular intervals.

3—EDITORIAL: For a distinguished example of editorial writing in a United States newspaper of general circulation published daily, Sunday or at least once a week.

4—RADIO: For a distinguished example of reporting on medicine or health on a United States radio station or network.

5—TELEVISION: For a distinguished example of reporting on medicine or health on a United States television station or network.

Awards Not Given

The awards will *not* be given for work, however excellent, that involves primarily the relaying of medical knowledge to the medical profession and to allied professions. Members of the medical profession, medical associations and their employees are not eligible to submit entries.

DOUBLE BLIND STUDY WITH DIAZEPAM,* CHLORDIAZEPOXIDE** AND PLACEBO IN THE TREATMENT OF PSYCHONEUROTIC ANXIETY

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■ ***Generally favorable results were noted in this clinical evaluation of Valium.***

ONE OF THE MOST valuable methods of drug evaluation, when feasible, is the controlled double-blind study.[1] Psychiatric drug therapy lends itself very nicely to this method. The power of suggestion inherent in any type of medication can be compared to that of a placebo having no function other than to test such suggestibility. An active drug of proven effectiveness also makes an ideal agent for comparison with the test drug. The purpose of our study was to compare the merits of a new drug, diazepam, against placebo, and an older drug, chlordiazepoxide, in treating symptoms of anxiety in psychoneurotic patients. Because chlordiazepoxide has been widely used in the treatment of anxiety and because both drugs are of the benzodiazepine class, it was chosen as the active standard for comparison.

Well Tolerated

Diazepam has been shown to be more potent than chlordiazepoxide in anticonvulsant and muscle relaxant effects in animals, and it is well tolerated by animals and man.[2] A further contrast between the two drugs appears to be in the range of symptoms affected. Although there is some overlapping, chlordiazepoxide produces excellent remission of mild to moderate anxiety and tension, whereas diazepam, effective also against anxiety, in addition, relieves depressive symptoms.[3] Towler[4] had good to excellent results in 19 of 20 patients treated with diazepam for anxiety. Vilkin and Lomas[5] considered it useful in the treatment of all types of anxiety, especially in neurotic patients.

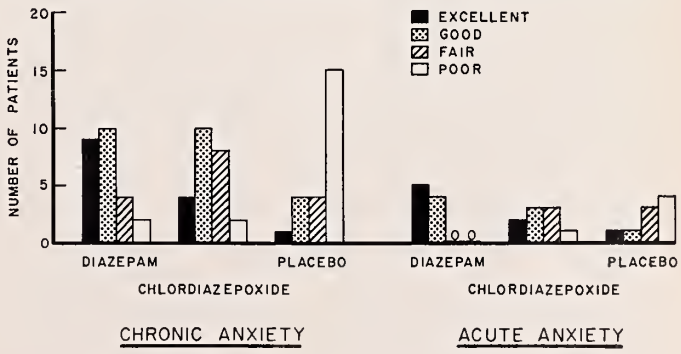
*Valium, Hoffmann-La Roche Inc., Nutley, New Jersey.
**Librium, Hoffmann-La Roche Inc., Nutley, New Jersey.

Before starting our controlled study we ran a preliminary pilot test. Of especial note was the wide range between the dose of diazepam that controlled symptoms and that which produced significant side effects. In this respect it appeared superior to chlordiazepoxide. However, to achieve a valid comparison, a controlled double blind study was set up.

Materials and Methods

Diazepam, chlordiazepoxide or placebo was administered to 100 private patients with symptoms of anxiety. These patients had been referred by other physicians whose opinion was that they needed psychiatric help over and above that which could be offered by them as general practitioners or specialists in nonpsychiatric branches of medicine. The anxieties were classified according to severity, duration and type (Figure I). There were 53 males and 47 females in the series with an age range of from 16 to 66 years. Many of the patients had previously received other antianxiety drugs and where possible

Figure I.
RESPONSE TO THERAPY IN PSYCHONEUROTIC PATIENTS WITH ANXIETY



comparisons were made with the present medications.

Identically appearing capsules of diazepam, chlordiazepoxide or placebo were prescribed to be taken three times daily. Each diazepam capsule contained five mg. and each chlordiazepoxide capsule, ten mg. of the active medication. The placebo contained an inert material. Each patient was given a prescription to be filled by the local pharmacist on the basis of a random numbered sampling. The pharmacist was provided with cards equally divided into A, B and C designating the three drugs. These cards were shuffled and the prescriptions were determined by the order of the cards. Notation was made on each card of the patient receiving it to insure that the patient received the same medication if the prescription needed to be refilled. At the close of the clinical experiment, the code was broken by the physician and the case report forms were then filled in with the name of the actual medication. Following the procedure as set up, 34 patients received diazepam, 33 chlordiazepoxide and 33 placebo.

At the outset of the study the patients were seen two or three times weekly for 45 minute periods of psychoanalytically oriented psychotherapy. Later visits were decreased to once a week until discharge. The study continued for from two to nine weeks.

Laboratory tests were performed on 86 patients. These consisted of white blood counts, hemoglobin determinations and/or urinalyses, done periodically on most patients, cephalin flocculation determinations in 15 and serum bilirubin in three patients.

Patients were evaluated on the basis of their response to the drug as determined by clinical judgment, results recorded on the Malamud-Sands rating scale as well as on a specially devised scale suitable for evaluating the change in specific symptoms of anxiety. The most prominent target symptoms were phobias (school, claustrophobia, loud noises, people, etc.), anorexia, agitation, insomnia, gastrointestinal disturbances, hyperventilation, palpitation, lump in the throat and tremor. On this basis the over-all response was judged to be excellent, good, fair or poor. The term excellent was reserved for nearly complete remission of symptoms, good and fair for corresponding degrees of partial remission, and poor for no change or aggravation of symptoms.

TABLE I

SIDE EFFECTS

	Diazepam	*Chlordiazepoxide*	*Placebo*
Drowsiness slight)	2	2	
Increased constipation	1	1	
Ataxia (mild)	3	1	1
Gastric irritation with nausea	1	1	1 1
Giddiness and nausea			1
Potentiation of aspirin	1		
Orthostatic hypotension			1
Rash		1 (medication discontinued)	1
Hand tremor	1		
Fatigue		1	
Agitation (first week)		1	
Dizziness (first week)		1	
Euphoria (first 3 of 7 weeks on medication)		1	
Many	1*		

**One patient complained of dry mouth, constipation, attacks of "unrealness," vomiting, vertigo, blindness, paresis of arms, nightmares, screaming, etc. Subsequently he reacted bizarrely to placebo, aspirin and peppermint water; therefore, he was considered as an unfit subject for any drug evaluation.*

Results

Results of the study showed that in psychoneurotic patients with anxiety, each of the active medications was significantly superior to placebo. Eighteen per cent of those taking chlordiazepoxide had excellent and 40 per cent had good results, a combined satisfactory response of 58 per cent. Similar results for diazepam were 41 per cent excellent and 41 per cent good with the satisfactory response totalling 82 per cent. Only six per cent of the patients receiving placebo had an excellent and 15 per cent a good response, the total satisfactory response being 21 per cent.

Figure I shows the distribution of results for each of the medications. This table, taken as a whole, shows satistically significant effects at a level of $P<.00002$ ($X^2(_4)=27.7$). Using appropriate chi-square tests, specific comparisons between pairs of medications gave the following results: 1) The percentage of excellent and good results on chlordiazepoxide were significantly better than placebo at a level of $P<.01$. 2) Diazepam was significantly superior to placebo at a level of $P<.00001$. 3) Diazepam was superior to chlordiazepoxide at a level of $P<.05$.

Side Effects

Side effects attributable to the drugs were reported by nine patients receiving diazepam, ten patients receiving chlordiazepoxide and by six on placebo (Table I). No one side effect was particularly notable. The most frequent was mild ataxia which was observed in three patients on diazepam and in one each on chlordiazepoxide and placebo. In only one case was it necessary to discontinue medication. A 47-year-old male broke out in a maculo-papular rash after 12 days of chlordiazepoxide therapy. This subsided only when medication was discontinued on the 18th day. In several patients the side effects disappeared on continued therapy and in others, changing the time of administration affected disappearance of untoward reactions; i.e., ataxia, drowsiness and agitation were alleviated by taking medication

TABLE II

COMPARISON OF DIAZEPAM, CHLORDIAZEPOXIDE AND PLACEBO WITH DRUGS RECEIVED PREVIOUSLY

	Number of patients in whom response to test drug was:								
	Better than prev. med.			Same as prev. med.			Worse than prev. med.		
	d	c	p	d	c	p	d	c	p
Phenothiazines	16	7	4	8	7	5	2	2	14
Meprobamate	16	16	5	1	1	5	1	1	1
Imipramine	2	1				1			1
Amitriptyline	1								
Chlordiazepoxide	1			1					3
Chloral hydrate	1								
Mephenoxalone		1		1	2				5
Hydroxyphenamate		1							1
Dexamyl								1	
Reserpine	1								
Barbiturates	7	5		2				2	3

after breakfast, rather than on an empty stomach. Laboratory reports were within normal limits in all but one patient who was later found to have anemia as a result of hookworm infestation.

When records of response to previous medications were available, comparisons revealed that both diazepam and chlordiazepoxide were generally superior in relieving anxiety. Previous to referral to us the most frequent medications given had been one of the phenothiazines or meprobamate; thus, these were the only two medications with which valid comparisons could be made. Table II shows the number of times other medications had been used previous to the test drugs and whether the test drug was considered better than, equal to, or lesser than the earlier medication in antianxiety effect. Many patients had received more than one drug, but at different times, in an effort to alleviate the symptoms.

The following case histories illustrate excellent responses to diazepam therapy:

Case Histories

P.W.A., a 27-year-old male, with chronic, severe, psychoneurotic anxiety, presented the following target symptoms: gastritis, anxiety, agitation and palpitations. Previously he had received meprobamate and mephenoxalone at separate times without wholly satisfactory results. Following administration of diazepam, improvement was immediate. The patient was able to work without difficulty and wanted to continue on medication after the six-week trial period. His only complaint was that when he took three aspirin tablets for a toothache he felt "drunk." His white blood count remained normal throughout the treatment period.

E.H., a 57-year-old female patient with psychoneurotic anxiety, had been receiving meprobamate before referral to us. Prominent target symptoms were hyperventilation syndrome, anxiety, anorexia and insomnia. There was a depressive tone to her illness. She was placed on diazepam, five mg. t.i.d. and experienced dramatic relief during the first week. After six weeks of therapy she claimed that she felt better than she had in years. Her blood count and the value of the cephalin flocculation test remained normal throughout treatment.

V.M., a 52-year-old female with severe acute psychoneurotic anxiety had prominent target symptoms of agitation, tremor, generalized fear and gastritis. About the third day after initiation of treatment she had total relief of symptoms. After the six-week trial period she was placed on prochlorperazine, 30 mg. per day which did not relieve her anxieties as well; this dose was increased to 45 mg. daily with results about the same as those with diazepam.

T.B., a 38-year-old male with severe chronic psychoneurotic anxiety had many fears about his masculinity, he also complained of tremor and flatulence. The referring physician had prescribed prochlorperazine, chlorpromazine and meprobamate in an effort to overcome the symptoms. With diazepam the patient's chronic anxiety over his potency and masculinity completely remitted. Some flatulence continued until the third week when it disappeared. After the trial period the patient was put on chlordiazepoxide, ten mg. six times daily, with continued relief.

While it is quite common that anxiety symptoms mask an underlying depression, the opposite is unusual. We had one patient, a 50-year-old male who showed some, but not marked anxiety, and had a prominent fear of crowds. We had originally diagnosed this patient as having a depressive reaction and had given him two different dosage schedules of imipramine and when that had not helped, tried desmethyl amitriptyline with no better results. Results following diazepam therapy were good. A follow-up several weeks after the end of the trial period revealed that the patient had maintained the improvement.

As in many double blind studies in which a placebo is used, it generally was not difficult to guess correctly which patients were receiving active and

which inert medication. In several instances we were positive that the changes in the patients could not have been caused by anything but an active drug. Two patients with school phobia illustrate this point. One, a 17-year-old boy, showed little or no response to medication and continued to refuse to attend school. He had severe anxiety attacks and hyperventilation. His response had been better, (although not adequate) on chlordiazepoxide, prescribed by the referring physician, and on prochlorperazine. The second patient, a 19-year-old girl, overcame her fears, returned to college without anxiety, was able to take an active part in class without difficulty and her grades improved significantly. With these comments on the case report forms it was no surprise, when the code was broken, that the first patient had received placebo and the second, diazepam. This was fairly typical but still there were some patients who had an excellent response to placebo and others who responded poorly to the active medications.

A Drawback

One major drawback to placebo administration is the difficulty in keeping some patients on the medication sufficiently long for adequate evaluation. A few who had been doing fairly well on previous medications refused to try any new drugs after placebo failure.

The difference in results between chlordiazepoxide and diazepam requires some comment. Diazepam was given at one-half the dosage of chlordiazepoxide. The majority of patients in the present study had moderate to severe anxiety and chlordiazepoxide appears to work best in mild to moderate anxiety. Also, during the test period, the dose of all drugs was standardized at one capsule three times daily. In some patients, after the trial period, the dose of chlordiazepoxide was increased to 50 or 60 mg. daily with a great improvement in response.

Diazepam, chlordiazepoxide or placebo was administered in double blind fashion to 100 outpatients with psychoneurotic symptoms of anxiety.

All medications, in identically appearing capsules, were prescribed to be taken three times daily. Evaluations were based on at least two weeks of therapy; the longest period was nine weeks. Each diazepam capsule contained five mg. and each chlordiazepoxide capsule ten mg. of the active drug. The active medications were significantly superior to placebo in controlling the symptoms of anxiety. Diazepam was superior to chlordiazepoxide at the doses used.

Mild Side Effects

Mild side effects were encountered in nine patients receiving diazepam, nine receiving chlordiazepoxide and six receiving placebo. In an additional patient on chlordiazepoxide it was necessary to discontinue medication because he developed a maculo-papular rash.

Both active drugs were generally superior to medications taken previously by the same patients for the relief of anxiety.

Results of this study indicated that diazepam is an excellent medication for the relief of moderate to severe anxiety in psychoneurotic patients.

Marshall Building

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AMERICAN MEDICAL POLITICAL ACTION COMMITTEE SCHEDULES ATLANTA WORKSHOP

The American Medical Political Action Committee (AMPAC) has scheduled a 12 state, southeastern regional workshop and leadership conference in Atlanta on March 21 and 22, 1964.

The Conference, to be held at the Atlanta Biltmore Hotel, will commence at 8:30 a.m. on the 21st. Many outstanding speakers including several Members of Congress will be featured on the two day program.

The 12 states who will send representatives to this conference are Georgia, Alabama, Arkansas, Florida, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas and Virginia.

The purpose of the AMPAC Conference is to teach physicians "how to be effective in the political action committee movement." The format of the program will assure maximum participation on the part of the conferees.

For Your MAG 1964 Annual Session Hotel & Motel Reservations

APPLICATION FOR HOTEL AND MOTEL ACCOMMODATIONS

Medical Association of Georgia 110th Annual Session

May 3, 4, 5, and 6, 1964 — Macon, Georgia

A HOUSING BUREAU has been established for your convenience in making hotel and motel reservations at Macon for the 1964 Annual Session of the Medical Association of Georgia. Comparable room rates and accommodation information are listed. *Use the Reservation Form below.* Please specify your first, second and third choice hotel or motel. All requests for reservations should give: (1) anticipated date and hour of arrival; (2) date and approximate hour of departure; (3) names and addresses of all persons who will occupy the accommodations. All reservations must be cleared through the Housing Bureau. Since all requests for rooms will be handled in chronological order, you should mail your application as early as possible to secure the accommodations you request. All reservations will be confirmed.

Dempsey Motor Hotel: 515 Cherry St. (SH. 2-2511). **Single $6 up, double $8 up, twin beds $9 up.** Air conditioned, 4 channel TV, 4 channel radio, background music, Eastern & Delta Airlines ticket office, limousine terminal, two restaurants, pet kennel, free inside parking, motor arcade, adjoining shops and stores, barber and beauty shop, in heart of downtown Macon. Special group rates.

Alpine Lodge: 1990 Riverside Dr. (SH. 6-6221). Members Quality Court, Inc., AAA. Wall to wall carpet, room control heat and air conditioning, 24 hr. service, TV in all rooms, tub and shower combination, Davis House of Fine Foods, swimming pool, **single room $7, double $9.50, twin $11.50.** Family rate on week-ends. Meeting rooms — capacity 200.

Ambassador Motel: 2772 Riverside Dr. (SH. 2-3687). Member AAA, Superior Courts, 5 minutes from downtown Macon. 63 rooms, **twin $10.50.** Convention room seating 300, restaurant seats total 580 — open 6 a.m. to 10 p.m. — catering to sales and convention groups. Fully air conditioned, TV, phones, pool.

Heritage Motel: 2690 Riverside Dr. (SH. 5-0417). Completely air conditioned, TV, pool, restaurant, lounge. **Singles $6.50, doubles $8 to $10, add single beds $1.50** — Special weekly rates.

Holiday Inn of Macon, Inc.: 1044 Riverside Dr. (downtown) (SH. 6-3561). 100 rooms, **singles $6.50, double $8, twin bedroom $10.** Air conditioned, free TV, radio, background music, ice, room telephones, restaurant, wall to wall carpet.

Magnolia Court & Grill: 4739 Houston Rd., (788-3042). **Single $4 up, double $6 and up, 3 persons $8 and up, 4 persons $9 and up.** Telephone, air conditioning, swimming pool, restaurant.

Pinebrook Inn: 4420 Forsyth Rd. (SH. 5-0429). **Single $5.50, double $7, twin $8, three $9, four $10.** TV in all rooms, swimming pool. Breakfast 8 to 9 a.m., dinner 5:30 p.m. until 1 a.m., 20 units.

Town Pavilion Motor Hotel: Walnut and Broadway, downtown Macon. (746-8121) (TWX MC 5008). **Single $7, double $9, twin bedroom $11 to $12, studio room $8.50 single, $11.50 double.** Air conditioned, TV, radio, background music, pool, direct dialing telephones, S & S Cafeteria, Perdita's Restaurant.

Confirmation of your request for accommodations will be in accordance with preference indicated, if possible; if not, best substitute will be made. Deposit of one day's room rent will be required with each request for accommodations.

Cut out and send to: Please Type or Print

HOUSING BUREAU, MEDICAL ASSOCIATION OF GEORGIA

Macon Chamber of Commerce, 646 First Street, Macon, Georgia

Please reserve the following accommodations for the 1964 Annual Session of the Medical Association of Georgia.

Hotel or Motel Preference	*Kind of Accommodations Desired*
1st Choice	☐ Double Room at $ ..... to $ .....
2nd Choice	☐ Double Room at $ ..... to $ .....
3rd Choice	☐ Twin Bedroom at $ ..... to $ .....
	☐ Other type .....

Arrival Date ..... Hour ..... A.M. ..... P.M.

Departure Date ..... Hour ..... A.M. ..... P.M.

THE NAME OF EACH HOTEL GUEST MUST BE LISTED. Include all names of all persons for whom you are requesting reservations and who will occupy the room(s):

Name of Occupant(s)	Address
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Individual Requesting Reservations

Name .....

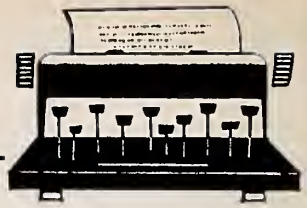
Address .....

City ..... State .....

Zip Code .....

If hotels or motels of your choice are unable to accept your reservations, the Housing Bureau will make reservations to fit your specifications elsewhere.

EDITORIALS



The Voice Of American Medicine

On January 22, American Medical Association President, Dr. Edward Annis, delivered a special address to the members of the Georgia General Assembly in joint session at the State Capitol building. In this way, medicine's story was presented to the political leadership of Georgia. And on that same day, Dr. Annis also addressed a large civic club, a medical school faculty and students, a county medical society, and the general public in two television appearances and radio interviews. All this by one dedicated doctor during just one day.

Physicians Urged

Some many months ago, your medical association urged that Georgia physicians speak up—and talk to civic groups, student groups, and political groups. Why? so that the views of the profession might be heard throughout the state.

With the progress of medical science and the complex problems of health care in the public eye, the people need to know more about the practice of medicine. Because of specialized training and actual experience, doctors of medicine are the authorities in the field of health care. It is imperative that physicians do speak up—or those without qualification will take leadership in speaking about medicine; how and who should run it.

The point of this message is simple. The profession must have its spokesmen if the public is to be enlightened. No one but a doctor of medicine can speak for the profession; therefore, it behooves every practitioner to talk to civic groups, to youth groups, to all the peoples of Georgia. *If each physician would give just one speech a month*—the story would be well told.

In the spirit of AMA President Annis, who gives of himself for the public and the profession, let each MAG member resolve for the New Year to carry some of the load. Then let each one of us talk to some group every month and bring medicine's story to the people.

Menopausal Estrogen Replacement?

"Don't tamper with a normal process!" How often this dictum has been applied to medical problems, particularly those of women. It is time to re-evaluate this time-honored approach to the management of the menopause.

Important Physiologic Event

Ovarian failure with a subsequent decrease in estrogen production seems to be the most important physiologic event in the phenomenon which marks the end of reproductive life. Much more distressing than infertility (to most women) are the other changes which follow. Vasomotor instability, atrophy of the vaginal mucosa, osteoporosis, and the loss of skin and breast turgor are just as inevitable and are of vastly greater clinical importance.

Estrogen is by no means a fountain of youth, because the aging process is far more complicated than a simple deficiency of one or more ovarian hormones. It does behoove us, however, to consider any means of making advancing age more tolerable.

Most Frequent Complaint

Probably the most frequent complaint of the perimenopausal female is a feeling of sudden warmth with flushing of the skin. Whether this is a result of estrogen deficiency or, as suggested by some, due to an excess of pituitary gonadotropic hormone, it nevertheless responds favorably to low doses of exogenous estrogen. Admittedly, most patients tolerate these symptoms, or they can be controlled with such

drugs as barbiturates. Why not be more specific, especially if the same treatment has many other advantages?

Every gynecologist is familiar with the problems which accompany atrophy of the pelvic mucosa—leukorrhea, pruritis, vaginitis, cystitis. Few women escape some of these manifestations. As good health becomes the rule instead of the exception in old age, sexual relations are enjoyed for more years, unless dysparuria results from thinning of the vaginal and perineal epithelium. Here the effects of estrogen are easily recognizable both grossly and microscopically. It has been suggested that study of the degree of vaginal cornification is one satisfactory method of selecting patients for estrogen replacement or recognizing the appropriate dosage.

Skeletal Degeneration

Skeletal degeneration is responsible for the typical change in posture, height, and fragility of the aging woman. Once established, osteoporosis is extremely difficult to reverse. The resulting pain and debility may respond to medication, including the estrogens and androgens, but is it not more reasonable to prevent this complication? Most reports have suggested that it may at least be delayed by administration of adequate estrogen.

There is no question that some women simply look younger than others of the same age. No doubt this is the result of many factors, one of which may be the maintenance of better skin and breast turgor by higher estrogen levels. Many have noted the apparent premature deterioration which sometimes follows early castration. Another impressive observation is the difference in the incidence of cardiovascular disease in women before and after cessation of ovarian function. A more specific causal relationship has yet to be identified, but estrogen seems to be a significant factor.

Disadvantages

Having mentioned several advantages of menopausal estrogen replacement, it is necessary to comment on the disadvantages. The most frequently alarming result is uterine bleeding due to endometrial stimulation. This may be induced even after many years of amenorrhea. Such bleeding stops when medication is withdrawn and is of significance only if it delays investigation of uterine malignancy. Some investigators are even undertaking the maintenance of regular menstrual periods by the cyclic administration of estrogenic and progestational agents, feeling that this intermittent shedding of endometrium might actually decrease the chance of endometrial carcinoma. Contrary to previous opinion, there is growing evidence that long continued estrogen therapy does not increase the incidence of carcinoma either in the uterus, breast or other areas. Of great importance, however, are regular examinations including bimanual pelvic palpation and cystologic or biopsy study.

Summary

In conclusion, it is probably not yet logical to say that every menopausal woman should be maintained indefinitely on ovarian hormones. It is even more illogical, however, to insist that they "suffer through" a period of acute symptoms followed by many years of slow debilitation if this can be safely prevented.

Earnest M. Curtis, M.D.

The Power To Be Decisive

Congressional hearings on the King-Anderson bill are over. Opponents and proponents have stated their case before Congress. The jury is out. What will the verdict be?

Since February, 1961, the medical profession throughout the country has been in a constant state of controlled warfare over the issue of social security medicine. Should social security coverage constitute a condition under which an individual, regardless of need, would become the beneficiary of Governmental medical care? This was and is the core of the issue.

During the past two years we have fought many battles and won most. We are now on the threshold of what might be the final battle of the King-Anderson war. Now is the time for us to put forth our greatest effort.

Campaign To Be Waged

Over the next few months proponents of the King-Anderson bill will wage a supreme election year campaign to win support for their program of medical care for all through the perilous mechanism of the Social Security System. We can expect the backers of this bill to resort to every means at their command to force the measure out of the Ways and

Means Committee. Our goal, simply stated, is to counteract their efforts by stimulating an expression of grass roots opposition so forcefully that there will be no doubt in the mind of Congress that the people do not want legislation of the King-Anderson type.

Now Is The Time

Now is the time for OPERATION HOMETOWN to get geared up for a maximum effort. Letters—short, friendly, direct and to the point remain the best weapon in the hands of anyone with something to say to the Congress. Without exception, Congressmen will tell you that nothing influences their position on a given issue like an expression from the "folks back home." Their mail is their most effective way of feeling the pulse of the public and hence they take great stock by the meaningful letters they receive from constituents.

Our job, while not easy, is certainly clear. This is an election year. Congress has just completed (1963) the longest peace time session in the past 22 years. For these reasons the 1964 session of Congress is likely to be a short one—ending possibly in July or August to accommodate both national party conventions. So, what has to be done must be done now. If we wait until the issue becomes critical we will have forfeited our advantage—surrendered the initiative to the other side—and will have to wage a come-from-behind fight just to stay even.

There have been times during the past two years when prospects for victory in this legislative fight seemed remote if not impossible. It was said that time was on the side of the proponents of King-Anderson. However, two years have elapsed, and the King-Anderson bill has yet to be enacted. We can win this fight, but we can't do it by depending exclusively on the AMA or MAG. The battleground is not in Washington, but in your office. You have the power to be decisive doctor—if only you will use it.

ARTHRITIS FOUNDATION ANNOUNCES NEW NATIONAL SCIENTIFIC AWARDS PROGRAM

The establishment of a national Arthritis Foundation Scientific Achievement Awards Program was announced today by The Arthritis and Rheumatism Foundation. The extensive program, first of its kind in the rheumatic diseases, has been set up to encourage increasing research efforts to find a solution to the mystery of crippling arthritis, according to Floyd B. Odlum, chairman of the board of the Foundation.

In describing the plan, Mr. Odlum called the new awards program an incentive for physicians and scientists to involve themselves in an all-out fight against these diseases which currently afflict more than 12,000,000 Americans.

Accelerated Efforts

"As the leading organization battling arthritis and the rheumatic diseases," he declared, "The Arthritis and Rheumatism Foundation is intensifying its efforts to focus attention on this very serious and widespread health problem. It is our hope that these awards may help accelerate efforts in the search for a cure and better treatment for all sufferers."

Mr. Odlum described the first award in the series as the ARF "Conquer Rheumatoid Arthritis Award," to recognize major advances in research leading to the discovery of the cause or cure of rheumatoid arthritis, one of the most painful and crippling forms of the disease. This cash award will be made from funds deposited annually on a continuing basis which will build up until the Foundation's Executive Committee can acknowledge a major "breakthrough."

Greatest Advances

The national health agency leader said another phase of the award program, "The Annual Research Awards," — a group of five cash awards — will give recognition to the greatest advances toward finding the cause or cure for *any* of the more than 60 forms of arthritis. These five awards are not, he emphasized, confined to rheumatoid arthritis as in the first program. These awards will be in sums of $3,000, $2,000, $1,000, and two $500 annually, and will be presented for the first time in the fall of 1964 at the Foundations annual meeting.

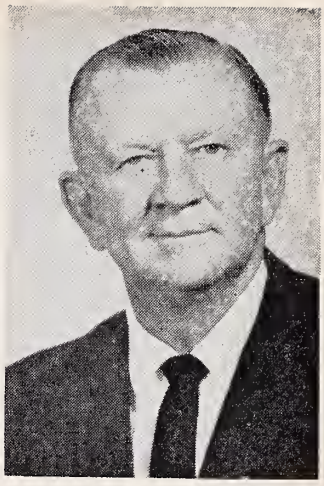
The third group in the series, "The ARF Fellowship Awards," will go annually to the Arthritis Foundation research fellows who make the best "showing" nationally in their special areas of research. These plaque awards will be judged by the organization's national Medical and Scientific Committee.

Mr. Odlum pointed out that the new series of awards is entirely separate from the ARF National Research Fellowship Program which the Foundation has carried on since 1951 and which last year supported the work of 48 scientists in the nation with research monies totaling $394,465. In addition, local research projects received grants in 1963 from 76 ARF chapters totalling $760,565.

Devoted Exclusively

The Arthritis and Rheumatism Foundation is the only national health agency exclusively devoted to the problem of arthritis and the rheumatic diseases. In addition to its nationwide attack on arthritis through research, the Foundation and its chapters carry on an extensive program to improve patient care and rehabilitation of arthritis sufferers, and to educate the public about this serious disease. The ARF also conducts a campaign to end fraud and misrepresentation in arthritis advertising, a problem which costs arthritis sufferers more than $250,000,000 a year, according to a recent national survey.

PRESIDENT'S LETTER



GEORGE R. DILLINGER, M.D.

MENTAL ILLNESS IN GEORGIA

ENORMOUS STRIDES have been made in recent years in the care of the mentally ill. This has been the result of many factors over many years.

(1) The acceptance by the public, due to education, that mental illness is an illness to be treated and not "insanity" to be locked in for life.

(2) While the cause of mental illness is unknown, certainly there is a better understanding by psychiatrists and physicians in general of the cause of the disease and its treatment.

(3) The development of drug therapy for the treatment of the mentally ill diminished markedly the admissions to mental hospitals.

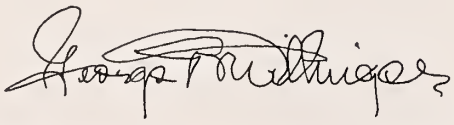
(4) Many mentally ill patients, severe psychotics, are treated by shock therapy and returned to normal living in a few weeks, instead of months or years.

(5) Better education, better homes and schools, and better living, all, have had their beneficial effect on mental illness.

In 1963 the federal government enacted into law two bills providing $594,200,000 over a period of years to combat mental illness and mental retardation. The money is to be spent for expanded research and community treatment centers.

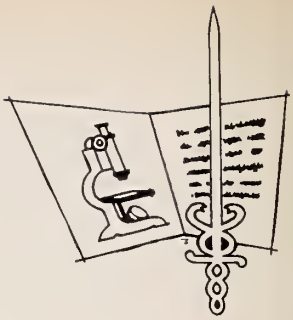
Key Feature

A key feature of the legislation is a $150,000,000 program of grants to the states for construction of community mental health centers for inpatient and outpatient treatment of the mentally ill. It is hoped that such centers will be able to take care of as much as 50 per cent of the mentally ill persons now in state mental institutions.



President, Medical Association of Georgia

CANCER PAGE



THE LYMPHOMAS

W. Harrison Reeves, M.D., *Atlanta*

It is the aim of this paper to present the significant highlights regarding our understanding of the lymphomas and to give references to the useful recent review articles.[1, 2, 3, 4]

It should be stated at the outset that the physician who undertakes to treat these malignancies must be ready to treat not only the cancer but the whole patient as well.

Etiology Unknown

The etiology of the lymphomas is unknown, whether one is speaking of the three histologic varieties of Hodgkins' Disease, lymphosarcoma (giant follicle, mature cell or lymphoblastoma), or reticulum cell sarcoma. These diseases present throughout the entire age spectrum with a peak mean age incidence for Hodgkins' Disease in the third decade, in lymphosarcoma (including giant follicle lymphoma) in the fourth decade, and reticulum cell sarcoma in the fifth decade.

There is a well known association (relatively small, percentage wise) between the lymphomas and the leukemias. This association exists primarily between Hodgkins' Disease and monocytic (and monoblastic) leukemia; between lymphosarcoma (including reticulum cell sarcoma) and lymphocytic and lymphoblastic leukemia. Occasionally the disease presents as a "lymphocytic proliferative process" wherein it is not known whether the disease began primarily as lymphoma or leukemia. The incidence of leukemia has increased remarkably (2.04 deaths per 100,000 population in 1921-1925 to 7.7 in 1951-1955) and so has lymphoma (0.7 deaths per 100,000 population in 1921 to 1.7 in 1951).

Earliest Sign

The earliest sign is usually that of a painlessly enlarged lymph node mass which may be in the lymph nodes of the neck (highest incidence), mediastinum, axilla, groin, para-aortic, or retro-peritoneal areas. Splenomegaly or hepatomegaly may be the initial manifestation or may be associated with the lymphadenopathy. Solitary involvement of gum, tonsil or tongue may occur, or origin in the skin may be encountered. Usually there are no systemic symptoms, but as the disease progresses, fever appears, associated with weight loss, asthenia and anemia.

The histologic diagnosis is dependent upon adequate biopsy. We are alert today to other associated changes in the blood picture—the blood proteins[5, 6] alkaline phosphatase, and disturbances of calcium, and carbohydrate metabolism. We know that autoimmune hemolytic anemia with a direct positive Coombs test presents in about 15 per cent of lympho-proliferative disorders (primarily chronic lymphocytic leukemia and lymphosarcoma.)

Prognosis is best determined by the clinical classification of disease which is as follows:

Class I — Disease limited clinically to a single lymph node group or to a single lesion in any organ, without constitutional symptoms.

Class II — Disease limited to two adjacent lymph node groups, or to a single organ lesion plus regional lymph node involvement, with or without constitutional symptoms.

Class III — Involvement of two separate lymph node groups or of multiple groups of lymph nodes, and/or more than one organ involved, with constitutional symptoms.

For all patients without separation of clinical classes, a 25 per cent five year survival rate is reported.[7] Freedman's survival data for the separate classes is 50 per cent five year survival in clinical class I, 43 per cent in class II, and 32 per cent in class III.

The mainstay of therapy for localized disease is the use of X-ray therapy with recent trends moving toward the use of supra-voltage equipment in higher dosage (up to 3500 R when possible). For generalized disease and for the terminal phase of the disease, various chemotherapeutic agents are em-

ployed. In recent years the accumulation of additional agents has made it possible to expose many otherwise critically ill and uncomfortable patients to successive agents (nitrogen mustard, TEM, Leukeran, Cytoxan, Velban, steroids). These drugs provide for gratifying relief of symptoms if not for overall increase in life span. Controversy still persists regarding improvement in longevity for today's patient in comparison with the outlook 30 years ago. But clinicians who have seen patients in both eras are convinced that the comfort of the patient is notably improved with today's chemical agents.

207 Doctors Building

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6. Good, Robert A., et al: The Occurrence of Leukemia and Lymphoma in Patients with Agammaglobulinemia, *Blood,* Vol. 21, p. 197, 1963.
7. Diamond, H. D.: The Natural History and Management of Lymphosarcoma. *Medical Clinics of North America,* Vol. 40, p. 721, 1956.

Approved by Professional Education Committee, Georgia Division ACS.

LEDERLE SYMPOSIUM WILL BE HELD IN MARCH AT AUGUSTA

Richmond County Medical Society, the Georgia Academy of General Practice and the Medical College of Georgia will serve as sponsors for the Lederle Symposium slated to be held Thursday, March 19, 1964, at the Augusta Town House Hotel, Augusta. Registration will be from 8:30 a.m. to 5:00 p.m. and the meeting will be held from 10:00 a.m. to 12:30 p.m. Luncheon for doctors and their wives will be served at 12:45 p.m. and the meeting will then resume at 3:50 p.m. A cocktail reception will be held from 5:30 to 6:30 p.m.

The Program

Subject of the program will be "The Polycystic Ovary Syndrome of Stein-Leventhal" and will include papers on the following subjects: "The Genesis of the Stein-Leventhal Syndrome," "The Chemistry of the Stein-Leventhal Syndrome," "The Pathology of the Syndrome," "The Clinical Variables of the Syndrome," "The Role of the Pituitary as it Affects the Stein-Leventhal Syndrome," "The Use of Corticoids in the Treatment of the Syndrome," "The Role of Clomiphene in the Management of the Syndrome," and "Wedge Resection of the Ovaries."

Faculty for the program will be Edwin C. Jungck, M.D., Medical College of Georgia, Augusta; John Loraine M.D., Clinical Endocrinology Research Unit, Edinburgh, Scotland; Ralph M. Richart, M.D., College of Physicians, Columbia University, New York; Geoffrey Venning, M.D., High Wycombe, England; V. B. Mahesh, M.D., Medical College of Georgia, Augusta; Irving Stein, M.D., Chicago, Illinois; Jacoba de Neuf, M.D., Assistant Professor of Obstetrics and Gynecology, Ohio State University, Columbus, Ohio; Robert A. Wilson, M.D., Methodist Hospital of Brooklyn, Brooklyn, New York; and Paul Starr, M.D., Emeritus Professor, University of Southern California, Los Angeles, California.

Further information concerning the symposium may be obtained by writing to Robert B. Greenblatt, M.D., Professor and Chairman, Department of Endocrinology, Medical College of Georgia, Augusta, Georgia.

DOUBT AND DISBELIEF IN CLINICAL PROGRESS

Not infrequently, it takes years and sometimes decades of widespread clinical experience to evaluate the relative merit of a drug in given conditions. From such long experience, a medical consensus generally emerges but even then some qualified physicians refuse to go along with their colleagues. History teaches that authoritarian bodies often have been guardians of orthodoxy rather than champions of progress. Medical experts rejected Jenner's smallpox vaccine, Pasteur's anthrax vaccine, Lister's theory of antisepsis and Semmelweis' discovery of the cause of childbed fever. Cod liver oil was rejected as worthless by the Council on Pharmacy and Chemistry of the American Medical Association. When Prontosil, the first sulfa drug, was introduced in the United States, it was greeted as another quack remedy by an outstanding American authority on infectious diseases. In the early 1930's, the same authority dismissed early English reports on penicillin as incredible and refused to employ for clinical testing a culture of penicillium that had been brought to him by one of his associates. He poured it down the sink. — Theodore G. Klumpp, M.D., at Conference of Professional and Scientific Societies, Chicago, Illinois, June 28, 1963.

QUALITY OF TESTING NEW DRUGS

The medical profession must assume a degree of responsibility for informing itself about laws and regulations under which it must function, about special problems arising from special drugs, and about the existence and potential value of new drugs. Professional and scientific societies through appropriate committees can play a significant role in accomplishing these objectives. Moreover, such committees might well address themselves to the important problem of the quality of clinical testing of drugs in various clinical fields of medicine. — Thomas B. Turner, M.D., Dean, Johns Hopkins University School of Medicine, at Conference of Professional and Scientific Societies, Chicago, Illinois, June 27, 1963.

DC DEFIBRILLATION — ITS CLINICAL USE

E. Alan Paulk, Jr., M.D.,* *Atlanta*

CARDIAC ARRHYTHMIAS are common; not infrequently their clinical management is difficult, hazardous, and unrewarding. The use of electrical countershock in the management of some of these arrhythmias has proven itself beneficial when other methods have failed. Presently, it seems that synchronized direct-current countershock may be the treatment of choice in certain arrhythmias. By discharging a brief electrical impulse at a safe interval within the cardiac cycle, the heart is completely depolarized, thus permitting the sinus node to resume as pacemaker.

Basic Considerations

There are several types of capacitor discharge defibrillators, each designed to produce a prescribed wave form of constant duration (usually 2.5 milliseconds). The number of watt-seconds, or joules, in each discharge can be varied by the operator up to 400 watt-seconds on most instruments. Normal external use requires between 50-400 watt-seconds for reversion, but it is recommended that the lower settings be used initially, then increasing the watt-seconds until the arrhythmia is terminated. Using less than 50 watt-seconds for external countershock is considered dangerous by all investigators. When normal rhythm persists only momentarily following a countershock, there is probably no advantage in increasing the setting before the next countershock.

The elective use of DC defibrillation brings to mind other considerations, some of which cannot yet be fully answered. These include the use of (1) anesthesia, (2) anticoagulants, (3) quinidine, and (4) synchronized countershock.

Anesthesia is no longer being used by some physicians, but many feel that its function in elective Capacitor Discharge Countershock (CDC) is distinctly beneficial. First, apprehension is alleviated. Although there is no "shock" with direct current (most patients describe it as an explosion), anxiety may be produced while awaiting the discharge, especially when more than one shock is necessary. Second, having the patient asleep and well-ventilated assures the operator of a well-oxygenated myocardium, should any difficulty arise during the procedure. Anesthesia is light, normally using 100-300 mgm. of thiopenthal (Pentothal Sodium), and most patients are asleep only two to five minutes.

Anticoagulation

In the past it has been customary to anticoagulate patients for ten to 14 days prior to reversion attempts with quinidine. The potential hazards of anticoagulant therapy, the prolongation of the hospital stay, and the ineffectiveness of anticoagulants on pre-formed thrombi have prompted most physicians to abstain from the use of these drugs in electrical reversion of cardiac arrhythmias. Thus far, about one per cent of patients have had evidence of emboli following reversion. Studies on anticoagulated patients undergoing "quinidine reversion" have also shown a one-to-three per cent incidence of emboli following reversion. Until the completion of further studies, the question of anticoagulation remains and the decision must be made by the physician, based on clinical data and his own emotional attitude.

Electrical Revision

Electrical revision of *atrial fibrillation* is superior to the former method, i.e., the use of quinidine; but it has not eliminated the necessity of using quinidine or other anti-arrhythmic drugs to help maintain sinus rhythm, once the rhythm has been restored. At the present time the usual procedure is to begin oral maintenance of quinidine sulfate one to two days prior to reversion. This allows the physician time to evaluate patient tolerance and sensitivity to the drug before reversion. It has been noted that some eight to ten per cent of patients will revert on the maintenance dose of quinidine even before electrical countershock is applied. The duration of quinidine therapy following reversion is unknown, but at least two to three months' maintenance therapy is necessary.

Synchronization is also considered unnecessary by some authorities. Lown has shown that ventricular fibrillation is uniformly produced when the

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discharge occurs in the "vulnerable" period of ventricular repolarization. When using the synchronizer, one must remember that any wave form of sufficient amplitude appearing on the monitor will trigger the synchronizer mechanism. In most cases, the best position for discharge is the zero setting on the synchronizer. This automatically delays the discharge 20 milliseconds following the triggering R wave (or S wave if the synchronizer is to be activated by a negative deflection).

In the case of *ventricular fibrillation,* no electrical discharge will return to normal function a heart that is hypoxic or acidotic. The uses of external massage, adequate ventilation, sodium bicarbonate or sodium lactate to reduce the acidosis, are mandatory preshock procedures. When the heart has been adequately prepared, a single shock of 100-200 watt-seconds will often terminate the arrhythmia. *Ventricular tachycardia* is also quite readily reverted with CDC. Most authorities continue to give a short trial of procainamide hydrochloride (Pronestyl) or quinidine gluconate before using CDC.

Long-term studies on the non-emergency use of direct-current countershock for atrial arrhythmias are not yet available, but certain inferences may be made on the basis of the current studies to date.

The most common arrhythmia to be managed electively by CDC is *atrial fibrillation.* Reversion to normal sinus rhythm is probably indicated in the following clinical conditions: (1) Recent onset of *atrial fibrillation* resulting in worsening of congestive heart failure or markedly decreased exercise tolerance; (At present there is no way to predict the value of the "atrial kick" in a given patient. Several studies have shown resting cardiac output to be increased up to 20 per cent following reversion. Increases up to 50 per cent have been noted when comparing cardiac outputs during exercise before and after electrical reversion.) (2) Postoperative patients following mitral commisurotomy; (3) Patients who develop signs of either arterial or multiple pulmonary emboli when other possible sources are excluded; (4) When the ventricular response to *atrial fibrillation* is difficult to control even with large doses of digitalis; (5) Persistent atrial fibrillation in patients already treated for hyperthyroidism.

Atrial flutter not responsive to digitalis and leading to a marked decrease in cardiac efficiency, angina pectoris, or frank cardiac decompensation usually responds readily to CDC. Care must be taken when adjusting the monitor-synchronized system that the "F" waves are not large enough to trigger the synchronizer. Other *atrial tachycardias* are also responsive to CDC, but these should not have reversion attempted if they are digitalis induced.

The elective use of CDC is not without risk. Once the heart is depolarized, there may not be a functional pacemaker capable of establishing normal rhythm. Even though the use of direct current is considered relatively safe, there is probably some myocardial damage with the higher settings; and, infrequently, multifocal ventricular ectopic contractions occur transiently following the countershock at 300 and 400 watt-seconds.

The value of CDC for routine use still must be evaluated. At present it does not serve as a replacement for conventional therapy but as an effective supplement in the management of certain cardiac arrhythmias. However, sound clinical judgment is mandatory in any case considered for direct-current defibrillation.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee/November 17, 1964, and Executive Committee and Council/December 7-8, 1964

A proposed four state regional Atlanta conference on Quackery to be held March 9, 1964, was approved. This meeting will be co-sponsored by MAG and the Atlanta District Food and Drug Administration.

MAG Secretary was asked to compile facts and figures on Kerr-Mills MAA implementation.

Approved the MAG Finance Committee proposed budget for the Association for calendar year 1964. (Budget will be published in full for submission to MAG House of Delegates.)

Voted to recommend to MAG House of Delegates: (a) The addition of three delegates; one to be chosen by and to represent the Medical College of Georgia, one to similarly represent the Emory University School of Medicine, and one to represent the Georgia Chapter, American Association of Public Health Physicians. (b) Provision for the succession to the office of Councilor and Vice Councilor of MAG should either be unable to complete a term of office.

Voted to undertake a study of the State Board of Health Community Hospital Psychiatric Program, Crippled Children's Services, Indigent Cancer Patient Care Program, Heart Clinic Program, Maternal and Child Health Clinicians' Services Program, etc.

Voted to investigate physician ownership of drug repackaging firms in accordance with the AMA House of Delegates resolution stipulating that such ownership is unethical.

Voted to oppose the recodification of the public health laws of Georgia, known as H.B. 162, as presently written, in view of the recomposition of the membership of the State Board of Health and other items.

Voted to notify those MAG members of the State Board of Health that the Association expects them to make and supervise the operations of the State Department of Public Health as to: (a) Overall policy matters; and (b) the Department's relations with the legislature, the Governor, and professional organizations.

GEORGIA'S DEVELOPING COMMUNITY HOSPITAL PSYCHIATRIC PROGRAM

Trawick H. Stubbs, M.D., *Atlanta*

After six years' experience with the Community Hospital Psychiatric Program (CHPP), Georgia may be ready to move forward with increased effectiveness toward the basic goals which led to the establishment in 1957 of the Intensive Treatment Program (ITP), original name for the same program. During the years of preliminary planning, organized medicine in Georgia raised an effective voice in calling for adequate diagnostic and treatment services as early and as close to home as possible for every victim of mental illness. The original concept of a state-wide system of screening centers was too ambitious for a state with trained psychiatrists in only six of its cities and general hospital psychiatric services in only two. Emphasis was therefore centered on a limited program of purchasing brief general hospital service for medically indigent, voluntary mental patients. Nearly 3,000 patients from 157 counties have been referred by local physicians, through local health departments, with (1) the referring physician and a psychiatric consultant determining medical eligibility, (2) the local health department determining financial eligibility, (3) the hospital psychiatric services determining admission and length of stay (eight weeks maximum), and (4) the State of Georgia supporting the program from the Health Department budget.

Various developments during these six years provide guide lines for appropriate changes in this program, which began as a two-year experiment, but has operated for six years with only minor changes. The change of name from "ITP" to "CHPP" followed the development of intensive treatment services at Milledgeville State Hospital after it was administratively moved to the Health Department in 1959. The title "Community Hospital Psychiatric Program" reflects the emphasis on using state tax dollars to help develop community resources while providing a limited state-supported medical (psychiatric) care program. Roughly two thirds of the $700,000 annual budget has been used to purchase service from the two medical school teaching hospitals (Talmadge Memorial and Grady Memorial) and one third for purchase from hospitals in Macon, Columbus, and Albany. The emphasis on training centers again reflects the "pump priming" function of the program. This program has made possible the majority of psychiatric residency positions at both medical schools.

A major essential element in the operation of this program has been the splendid cooperation of the psychiatrists in private practice. Some of these local psychiatrists now insist on working on the same basis as other physicians, providing service without payment to a limited number of indigent patients, whose hospital bills will still be paid. This will accelerate further the trend toward increasing local control of this program. The gains in local autonomy may be achieved at the price of less complete state-wide coverage. The small number of psychiatric beds, with increasing demands for private service and increasing insurance coverage, is a limiting factor just as significant as limits in available state dollars. A restricted geographic coverage would be offset by the advantage of increased effectiveness in coordination of the hospital services with local health departments, vocational rehabilitation, and other resources — especially the family physician.

This increased coordination, with maximum utilization of total resources for meeting needs, is the essence of the currently popular concept of community mental health centers. In Georgia, these centers exist now in embryonic form in the harmonized efforts of local health departments, hospitals, and other resources. A well-rounded community mental health program includes an effective combination of private and public resources which must be maintained in appropriate and effective balance, and in an atmosphere of mutual respect and confidence. During the next two years while the Division of Mental Health is working on a long-range Mental Health Program, private physicians and organized medicine will have a responsible voice in guiding the future progress of state programs. During this period, however, time does not stand still, and various modifications, not yet clearly defined, will inevitably occur in the continuing development of the Community Hospital Psychiatric Program.

Division of Mental Health
Georgia Department of Public Health

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

ABSTRACTS BY GEORGIA AUTHORS

Yeh, Thomas J., M.D., and Arthur L. Humphries, Jr., M.D., Medical College of Georgia, Augusta, Ga. "Spontaneous Rupture of Esophagus Associated with Epiphrenic Diverticulum," J. Thoracic & Cardiovas. Surg. 46:271-275 (Aug.) 1963.

A case of spontaneous rupture of esophagus associated with epiphrenic diverticulum, the second reported case, is presented. The patient received primary repair, went home two weeks later, and remains symptom-free six months later.

Findley, Thomas, M.D., and A. P. Briggs, M.D., Eugene Talmadge Hospital, Augusta, Georgia, "Uremic Acidosis: Some Alternate Views," Am. Heart J. 66:142-144 (July) 1963.

The conventional explanation for the conversion of an alkaline glomerular filtrate to an acid urine is that protons are actively secreted by the renal tubule in exchange for resorbed sodium; renal acidosis is therefore due to diminished H+ secretion. This review, however, points out that acidification of the urine could just as well be explained by resorption of an alkaline fluid (NaOH, $NaCO_3$). Water dissociates instantaneously into H+ and OH– ions, and the resorbed NaOH is buffered by intracellular H_2CO_3. It is likely that urinary protons, therefore, appear in the urine de novo and that those from strong metabolic acids are disposed of in the lungs rather than in the urine.

Bryans, C. I., Jr., M.D.; Wesley L. Southerland, M.D.; and Frederick P. Zuspan, M.D., Medical College of Geargia, Augusta, Georgia, "Eclampsia: A Long-term Follow-up Study," Obst. & Gynecol. 21:701-707 (June) 1963.

In 1948 a study was made of 243 women who had had eclampsia an average of 12 years previously in an effort to determine the relationship of toxemia of pregnancy to chronic hypertensive disease. According to the criteria used, the incidence of hypertension in these women was not found to be significantly increased.

In the current study 118 of the same women, now 40 or more years of age, were again examined. The time elapsed since the attack of eclampsia in this group averaged 24 years. All available relatives (parents, grandparents, siblings, children) were also examined.

It was concluded that toxemia of pregnancy does not cause chronic hypertension, but that women with a genetic tendency to hypertensive disease are prone to develop toxemia. Whether or not permanent hypertension follows an attack of preeclampsia or eclampsia depends primarily on her inheritance.

Smith, Jael P., M.D., 340 Baulevard, N.E., Atlanta 12, Georgia, "Alleviatian af Post Tonsillectamy Pain and Infectian," Laryngoscape 73:461-465 (April) 1963.

A six year research and clinical evaluation of post tonsillectomy pain and infection, using various dilutions and combinations of penicillin, local anesthetics, and corticosteroids, has resulted in development of an aqueous injectable suspension which contains, per c.c.: Penicillin O, Chloroprocain 150,000 Units, (Depo-cero-cillin, Upjohn), plus 4 mgm of Methyprednisolone (Depo-Medrol, Upjohn), and 1.8 per cent W/V Lidocain.

This aqueous suspension is administered by a single injection into each tonsillar fossa, just deep to the capsule, as soon as the tonsil is removed. Prior to injection, every patient is given an intradermal or conjunctival allergic test of the suspension used. A single injection is effective for six to eight days.

Four investigators have used this procedure on 3,715 cases of tonsillectomy and adeno-tonsillectomy, with no serious complications. Seven cases presented from a current double blind study, demonstrated general appearance, trismus, stiff neck, and dysphagia, as the most reliable objective observations in distinguishing placebo from medication patients the first postoperative day.

King, James T., M.D., 340 Boulevard, N.E., Atlanta 12, Georgia, "Dangers of Injectians into the Tonsillar Fossae After Tonsillectomy," Laryngascape 73:466-467 (April) 1963.

Before making injections into the tonsillar fossae after tonsillectomy, the following hazards and their avoidance should be kept in mind.

Hazard No. 1. Hemorrhage from trauma to the great vessels in the area especially the internal carotid artery, to include intravescular injection. *Avoidance*: always palpate for the carotid arteries which can be quite near. The safest site for injection is just underneath the mid anterior pillar as this is farthest from vessels and nerve of consequence.

Hazard No. 2. Obstruction to the airway by distension from injecting a large amount of solution. *Avoidance*: inject the solution in such a way that the newly vacated fossa will be only partially filled.

Hazard No. 3. Allergy to include anaphylactic or toxic reaction. *Avoidance*: never use when allergy or local toxicity to any of the ingredients is suspected.

Hazard No. 4. Paralysis of the defensive throat reflexes with ensuing aspiration of vomitus, blood, mucus or the medicine. *Avoidance*: after anesthesia has been discontinued, wait for the defensive swallow reflex to return before moving the patient from the operating room.

White, Arthur, Linda Lyan, and Franses Faster, Department of Medicine, Medical College af Georgia, Augusta, Georgia, "Effect af Human Serum and Tween 80 an Several Mycabacteriaphages and Susceptible Mycabacteria," Amer. Rev. Resp. Dis. 87:730-733 (May) 1963.

A gamma globulin fraction of human serum prevented propagation of most mycobacteriophages on susceptible mycobacteria. Higher concentrations of serum were required to prevent propagation of most phages on saprophytic mycobacteria as compared to propagation on human tubercle bacilli.

Tween®80 prevented propagation of all phages on all susceptible mycobacteria tested.

An albumin fraction of human serium prevented this inhibitory effect of Tween®80 but did not effect propagation in media without Tween®80.

Greenblatt, Rabert B., M.D., Medical College of Georgia, Augusta, Georgia, "A Sacred and Prafane View af Aging: Koheleth and Shakespeare Campared," J. Amer. Geriatric Sac. 11:419-421 (May) 1963.

The post-philosophers, Koheleth, the author of Ecclesiastes, and Shakespeare, in two of his great plays (*Comedy of Errors* and *As You Like It*), gave us a caricature of advanced age in very much the same fashion.

It is fascinating to compare the style of the author of Ecclesiastes, cloaked as it is in mystery and vagueness of language, with that of the poet who wrote with such clarity and simplicity some 17 centuries later.

It would seem that Shakespeare merely paraphrased many of the thoughts expressed by Koheleth, and it is interesting to compare some of the lines from Ecclesiastes with those of Shakespeare. For instance, "the grinders cease because they are few' (sans teeth); "those that look out of the windows be darkened, (my wasting lamps, or sans eyes); "when the sound of the grinding is low' (my dull deaf ears); "all the daughters of musick shall be brought low' (turning again toward childish treble); "the almond tree shall flourish' (face of mine be hid in sap-consuming winter's drizzled snow); and "desire shall fail" (yet hath my night of life some memory; "the wheel broken at the cistern" (all the conduits of my blood froze up).

Lague, R. Bruce, M.D.; James V. Ragers, M.D.; and Brit B. Gay, Jr., M.D., Emory Hospital, Atlanta 22, Georgia, "Subtle Raentgenographic Signs of Left Heart Failure," Am. Heart J. 65:464-473 (April) 1963.

Left heart failure can often be detected by X-ray before it is clinically apparent. Twenty-four per cent of 114 cases of interstitial edema were diagnosed by the radiologist at a time when it was clinically unsuspected. X-ray changes of interstitial pulmonary edema include dilated pulmonary veins, increased interstitial density (clouding of the lungs), septal lines, thickened interlobar tissues and dilatation of the pulmonary artery and its major branches.

Thrash, Agatha Moody, M.D. and Hisami Iri, M.D., St. Francis Hospital, Columbus, Georgia, "Adrenal Infarction," Arch. Path. 75:538-542 (May) 1963.

Each of the six cases presented showed histologic evidence of inflammation or thrombosis of periadrenal arteries, and some degree of medullary vein thrombosis. At least one episode of cardiovascular collapse occurred during the final illness. Major diseases suffered by the six patients were bronchopneumonia, myocardial infarction, staphylococcal septicemia, encephalomalacia, carcinoma of rectum, bleeding gastric ulcer, and jejunal infarction.

The mechanism of adrenal infarction in these cases can be explained on the basis of transient arterial spasm. Cardiovascular collapse prolonged for sufficient time will produce irreversible damage in a tissue of such a high rate of oxygen consumption as the adrenal cortex. This condition should be suspected in patients who experience overwhelming infections or shock. Confusion, restlessness, headache, nausea and vomiting, diarrhea and abdominal pain may be of clinical help in making a diagnosis.

The laboratory may contribute to the diagnosis by reports of sodium and chloride loss, potassium retention, hypoglycemia, hemoconcentration, and differential leukocyte counts.

McDonald, James K., M.D.; John K. Kelley, M.D.; Larry D. Brack, M.D., and Elmer J. Bartunek, B.A., Medical College of Georgia, Augusta,, Georgia, and Mental Hygiene Clinic, Fort Jackson, South Caralina, "Variability of the Palmomental Reflex," J. Nerv. & Mental Dis. 136:207-215 (March) 1963.

The presence of a strong palmomental reflext or its closely related pollicomental reflex has been considered by some as being indicative of an organic brain lesion. One thousand nine hundred and fifty-one young male Army recruits were checked for the presence of these reflexes at the time of their induction into the Army. They were subsequently rechecked for this reflex in several different settings. Marked changes were noted in the clinical presence or absence of the reflex, the rapidity with which the reflex habituates and the extension of the reflexogenous zone to the volar surface of the terminal phalanx of the thumb (pollicomental reflex). Analysis of the results of this testing indicated that anxiety plays some part in these changes.

The variability of the palmomental reflex appears to be another example of the influence of anxiety on the neuromuscular apparatus; therefore, the palmomental and pollicomental reflexes should not be considered in terms of mere presence or absence, but consideration given to the strength of the reflex (how rapidly it habituates). Similarly, a strong positive reflex should not be considered a pathognomonic sign of a central nervous system lesion without giving attention to the emotional state of the patient.

Albert, Bernard L., M.D., and Thomas F. Sellers, Jr., M.D., 1600 Clifton Road, N.E., Atlanta 22, Georgia, "Caccidioidomycosis from Fomites," Arch. Int. Med. 112-253-260 (August) 1963.

A case of proved primary coccidioidomycosis which occurred in an Atlanta area waste cotton mill worker is reported. This patient had never been outside of the states of Georgia, Tennessee, or North Carolina. Epidemiologic evidence indicated that he had probably acquired the disease from bales of cotton originating from the San Joaquin Valley of California. An intensive search failed to reveal additional cases. A review of the literature revealed that the only other published case of coccidioidomycosis from Georgia occurred in an individual who had become infected while visiting in California many years previously.

Although many references have been made to the frequent spread of *Coccidioides immitis* by fomites, only 24 such case reports have been published and in only nine of these cases was the mycologic diagnosis confirmed. Laboratory infections, which are readily contracted, and cases acquired in the Southwest and adjacent Mexico account for the vast majority of cases of this infection seen outside the endemic area.

Dowman, Charles E., M.D., 478 Peachtree Street, N.E., Atlanta 8, Georgia, Midline Scalp Lesions," South M.J. 56:777-781 (July) 63.

At times scalp masses are attacked in the office. If they are in the midline, such an approach may be dangerous since there are many pitfalls for the unwary. By operating upon a midline scalp lesion in the operating room the patient is given his best chance.

Some scalp lesions are not helped surgically, others need help for appearance, and in still others operation must be done to save life and prevent crippling.

The body of the paper covers assorted lesions, the majority of which represent embryological variance. Many of these children are otherwise crippled or may die with infection. Midline scalp lesions should not be cared for as an office procedure.

Achard, James L., M.D.; John T. Galambos, M.D.; and J. Spalding Schroder, M.D., 69 Butler Street, S.E., Atlanta 3, Georgia, "Extrahepatic Obstructive Jaundice with Viral Hepatitis on Biopsy," South M.J. 56:1294-1297 (Nov.) 63.

The differential diagnosis of jaundice is still a problem of considerable magnitude. The "obvious" clinical diagnosis is all too often refuted by microscopic examination of tissue. The general reliability of the liver biopsy in correlating with necropsy findings is good, especially in diffuse liver disease. Unfortunately, long standing viral hepatitis has been confused with extrahepatic obstruction on biopsy but the converse seems to be more unusual.

Two cases are presented which, at onset of jaundice, appeared to be viral hepatitis and biopsies in both cases were "diagnostic" of this disease. However, exploratory laparotomy in one and percutaneous cholangiography followed by laparotomy in the second revealed carcinoma of the pancreas in both. While needle biopsy of the liver is of great value in the diagnosis of jaundice, findings must be interpreted in the clinical setting. Viral hepatitis on biopsy is usually an adequate explanation of a picture of obstructive jaundice, but further procedures may occasionally be indicated.

Briggs, A. P., M.D., and Thomas Findley, M.D., Medical College of Georgia, Augusta, Georgia, "The Disposal of Strong Metabolic Acid Protons," Metabolism 12:969-974 (Nov.) 63.

Although the protons of the urinary acid are usually depicted as originating from locally produced H^+ HCO_3 in a $Na^+ <> H^+$ exchange, it continues to be the custom to report these *same* protons when determined as titratable acid plus ammonia, as the protons of strong, or nonvolatile metabolic acid. Close scrutiny of the reactions of neutralization, which should be expected to occur as strong acids are formed in various tissues, reveals that substantially all of the protons of these acids must be transferred directly, or indirectly through buffer adjustments, to HCO_3. The resulting H_2CO_3 (CO_2+H_2O) is then disposed of extrarenally: H_2O to body water; CO_2 by the lungs. The urinary acid from this viewpoint is only an incidental byproduct of the renal regeneration of plasma bicarbonate.

Amerson, J. Richard, M.D., and Ira Fergusan, Jr., M.D., Emory University Clinic, Atlanta 22, Georgia, "Traumatic Hemobilia," Surgery 54:729-735 (Nov.) 63.

Two cases of traumatic hemobilia are reported, one secondary to blunt abdominal injury and the other a result of a penetrating liver injury.

Traumatic hemobilia has been defined as gastrointestinal hemorrhage from a branch of the hepatic artery through an intrahepatic hematoma into a biliary radical and through the common duct into the duodenum. This follows blunt or penetrating abdominal trauma by a period of one to 90 days, and is manifested clinically by gastrointestinal bleeding in association with biliary colic.

The pathological changes are thought to be due to an intrahepatic disruption of hepatic structure due to trauma with secondary erosion into both the biliary and hepatic vascular tree. There is either no capsular injury of the liver or the bleeding through the biliary tract occurs after healing of any capsular laceration.

In any event, the disease process may not be evident even on external examination of the liver at laparotomy but can be demonstrated by cholangiography.

Treatment of this condition is surgical and consists of control of the fistula either by hepatic resection or by evacuation of the hematoma and ligation. In the 30 reported cases there has been a mortality rate of 37 per cent. Many of these cases have required repeated explorations before the nature of their disease was recognized.

DEATHS

A. HERBERT FOWLER, SR., 64, a Cobb County physician for 34 years, died December 8, 1963, in a private hospital.

Dr. Fowler, born in Woodstock, was a member of the Kennestone Hospital staff.

He was a Mason and a member of the Marietta Kiwanis Club, Cobb County Medical Society, Medical Association of Georgia and the American Medical Association.

Survivors include his wife, the former Luvie Brown; two daughters, Miss Eloise Fowler, Atlanta, and Mrs. Kingsley E. Miller, Jr., and a son, Andrew H. Fowler, Jr., both of Marietta; two sisters, Mrs. Austin Boatner, Rome, and Mrs. Gilbert Reeves, and a brother, Thomas Clyde Fowler, both of Woodstock.

ROBERT CLARENCE MONTGOMERY of Butler, Georgia, died November 10, 1963, in Piedmont Hospital after a brief illness.

Dr. Montgomery graduated from the University of Georgia Medical College in 1913. He received his post graduate training in surgery at Cook County Hospital, Chicago, 1922-1925, at which time he was associated with the late Dr. Max Thorax.

He returned to Butler to found The Montgomery Hospital. He was a member of the International College of Surgeons, Southeastern Surgical Congress, Past-Board Member of Georgia Department of Public Health, and a member of Vocational Rehabilitation.

He is survived by his wife, Annera McLendon Montgomery and one son, Dr. R. Clifford Montgomery of Butler.

CHARLES E. PATTILLO, SR., 80, of Decatur, died December 16, 1963.

Dr. Pattillo, a native of Powder Springs, was graduated from the old Atlanta College of Physicians and Surgeons, now the Emory University Medical School, and began his practice in Decatur in 1910. He retired 20 years ago.

He was a member of the American Medical Association, the Medical Association of Georgia, and the DeKalb County Medical Society. He was a former member of the Decatur City Commission, and was the founder and first stockholder of Decatur Federal Savings and Loan Association.

Dr. Pattillo was a trustee in the Pattillo Memorial Methodist Church.

During his practice, he had been a member of the staffs of Emory University Hospital and St. Joseph's Infirmary. He was an honorary member of the staff of DeKalb General Hospital.

Surviving are his widow, the former Lillian Apperson; a daughter, Mrs. Ernest Kendall of Monroe; sons, Dr. Gibson M. Pattillo of Arkansas Pass, Tex., and Charles E. Pattillo, Jr., of Decatur; sisters, Mrs. Alfred Knight of Decatur and Mrs. Albert G. Ingram of Augusta; a brother, Frank Pattillo of Decatur, and ten grandchildren.

DAN YALE SAGE, an Atlanta doctor for 50 years, died of a heart attack at his home December 21, 1963.

Dr. Sage was president of the Fulton County Medical Society. He was also a member of North Avenue Presbyterian Church, Capital City Club, and was a Kiwanian.

Dr. Sage is survived by his widow, the former Irene Ingram; a son, Dan Yale Sage, Jr., of Atlanta, and three grandchildren.

SOCIETIES

Braswell E. Collins has been elected President of the BIBB COUNTY MEDICAL SOCIETY succeeding E. C. McMillan. Other officers are Earl Lewis, President-Elect; H. K. Sealy, Vice President; J. T. Dupree, Secretary; and Robert Edenfield, Parliamentarian.

Frank M. Houser, Ralph G. Newton, Jr., and Z. Sweeney Sikes were elected to the board of trustees. Jasper Hogan and Milledge Newton were named delegates to the Medical Association of Georgia. Gordon Jackson and Milton Johnson were named alternates.

For their December meeting, members of the CAMDEN-CHARLTON MEDICAL SOCIETY, their guests and wives were entertained at the Kingsland home of Dr. and Mrs. R. R. McCollum. Speaking to the group was E. F. McCall, M.D., obstetrician and gynecologist from Jacksonville, Florida. Newly elected officers include G. W. Barker of St. Marys as President; C. H. Harper of Folkston, Vice President; H. H. Robinson, Kingsland, Secretary-Treasurer; and J. M. Jackson, Folkston, MAG Delegate and J. O. Simmons, Woodbine, Alternate.

Newly elected officers of EMANUEL COUNTY MEDICAL SOCIETY include President, H. W. Smith; Vice President, H. R. Frost; Secretary-Treasurer, C. E. Powell; MAG Delegate, R. J. Moye; and Alternate Delegate, C. E. Powell.

Lamar B. Peacock will serve as President-Elect of FULTON COUNTY MEDICAL SOCIETY after defeating Lester Rumble, Jr. in a close contest. Thomas J. Anderson was installed in January as the new 1964 President of the society and will have serving with him Fleming L. Jolley, as Vice President. Dr. Anderson succeeds R. Carter Davis, 1963 President of the society.

At its meeting December 19 in Atlanta, the society welcomed more than 100 new members and presented certificates of appreciation to Mrs. Nancy Orme McCord, former society secretary; Mrs. Milton F. Bryant, President of the society's Womens Auxiliary, and the following physicians, H. Walker Jernigan, Tully T. Blalock, Richard W. Blumberg, Walter L. Bloom, William G. Whitaker, Walker L. Curtis and Homer S. Swanson. They were honored for outstanding service to the society and its programs during the past year.

THE ASSOCIATION / Continued

The GEORGIA MEDICAL SOCIETY recently announced the election of Robert B. Gottschalk as President-Elect of the society. Other officers elected were Jeff J. Holloman, Secretary, and J. J. Doolan, Jr., Treasurer. A. F. Williams, President-Elect for the past year, was advanced to the Presidency to succeed Charles L. Prince.

New officers of the HABERSHAM COUNTY MEDICAL SOCIETY were elected at a supper meeting of the group held December 10 at Cornelia.

The new President is Bruce Swain. Serving with him during 1964 will be T. L. Hodges, Jr., Vice President and Treasurer.

Jack B. Edwards was named the Delegate to the Medical Association of Georgia with F. O. Garrison as Alternate. T. N. Lumsden will serve as Public Relations Officer.

Raymond A. Chipman was installed as 1964 President of the MUSCOGEE COUNTY MEDICAL SOCIETY at the society's annual meeting held November 26, 1963, at Columbus. George R. Conner will serve as President-Elect and Edmund M. Molnar as Secretary-Treasurer. Delegates elected to attend the Medical Association of Georgia convention to be held in Macon during 1964 included Louis Hazouri, Simons Brocato and Roy Gibson. Alternate delegates are John Deaton, James Rhea and Harry Brill. The delegates will serve until 1966.

Lawrence K. Altman, of the Communicable Disease Center, Atlanta, and B. R. Gendel, Emory University School of Medicine, were speakers at the meeting of the SIXTH DISTRICT MEDICAL SOCIETY December 4, at Macon. Dr. Altman spoke on "Botulism," and Dr. Gendel on "Cytogenetics." Local speakers on the program included Drs. Arthur Butterfield, Charles Magnan, A. M. Phillips, Jr., Edward L. Stevens, and Frank Cronic.

WALKER-CATOOSA-DADE MEDICAL SOCIETY recently elected officers for 1964. They are William D. Crawley, Rossville, President; John C. Ellis, Rossville, President-Elect; and Murphy K. Cureton, LaFayette, Secretary-Treasurer.

PERSONALS

Twelve Georgia physicians have recently been designated as Fellows and Associates of the American College of Physicians. Elected as Fellows were ROBERT H. FRANCH, Atlanta, and VICTOR A. MOORE of Augusta. Selected as Associates were LOUIS H. FELDER, Atlanta; GORDON E. WALTERS, Augusta; BENJAMIN B. OKEL, Decatur; STANTON P. FISCHER and KIRWAN T. MacMILLAN, Fort Benning; WILLIAM J. O'SHAUGNESSEY, Macon; GEORGE T. MIMS, Marietta; ERNEST E. PROCTOR, Newnan; TRACY LEVY, Savannah; and SAMUEL P. TILLMAN, Statesboro.

First District

M. FERNAN-NUNEZ, of Savannah, was the guest speaker at the annual banquet meeting of the Bulloch-Candler-Evans County Medical Society, at the Statesboro Country Club, December 10th. His topic was "Common Diseases of Equatorial West Africa," illustrated with motion pictures in color of cases treated by him during his visit to Spanish Guinea as a member of the Royal Spanish Sleeping Sickness Commission of the University of Madrid School of Tropical Medicine.

ERNEST G. EDWARDS, Savannah, assumed duties January 1, 1964, as Chief of the Medical Staff of Memorial Hospital, succeeding FRANKLIN P. BOUSQUET. Other new officers of Memorial's staff are IRVING VICTOR, President-Elect, who will succeed Dr. Edwards in 1965, and JAMES C. METTS, Jr., Secretary.

Second District

W. McCALL CALHOUN, formerly of Buena Vista, has recently opened offices in Blakely. He has moved into newly constructed offices on South Church Street.

Third District

Montezuma physician, A. J. MORRIS, has been notified by the American Board of Surgery, Philadelphia, that he has been accepted as a Diplomate of the American Board of Surgery, having successfully completed the second half of the examination which was given at Bowman Gray School of Medicine, Winston-Salem, N.C., in November.

WILLIAM B. McMATH, Americus, has been elected to serve as President of the Medical Staff of the Americus and Sumter County Hospital for 1964. He succeeds HENRY B. FENN, who will serve as Vice President. FRED THOMPSON was re-elected to his position as Secretary-Treasurer.

Fourth District

No news submitted.

Fifth District

SPALDING SCHROEDER, Atlanta, addressed the Calhoun County Medical Society in Anniston, Alabama, November 20, 1963, on "The Use of Steroids in the Treatment of Hepatitis."

Atlanta physician, JOHN S. ATWATER, has recently been reappointed as Consultant to the Committee on Aging, Council on Medical Service, American Medical Association.

Sixth District

No news submitted.

Seventh District

HAROLD M. GRUNDSET has recently joined EARL McGHEE and ROBERT RAITZ in the general practice of medicine at the Dalton Medical Center, Dalton, Georgia.

Eighth District

No news submitted.

Ninth District

No news submitted.

Tenth District

No news submitted.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

MARCH / 1964

PROGRAM ISSUE

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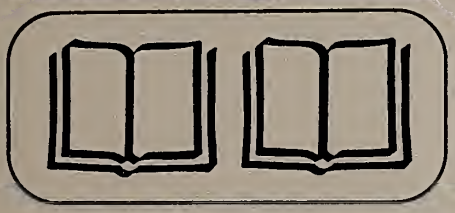
110TH ANNUAL SESSION



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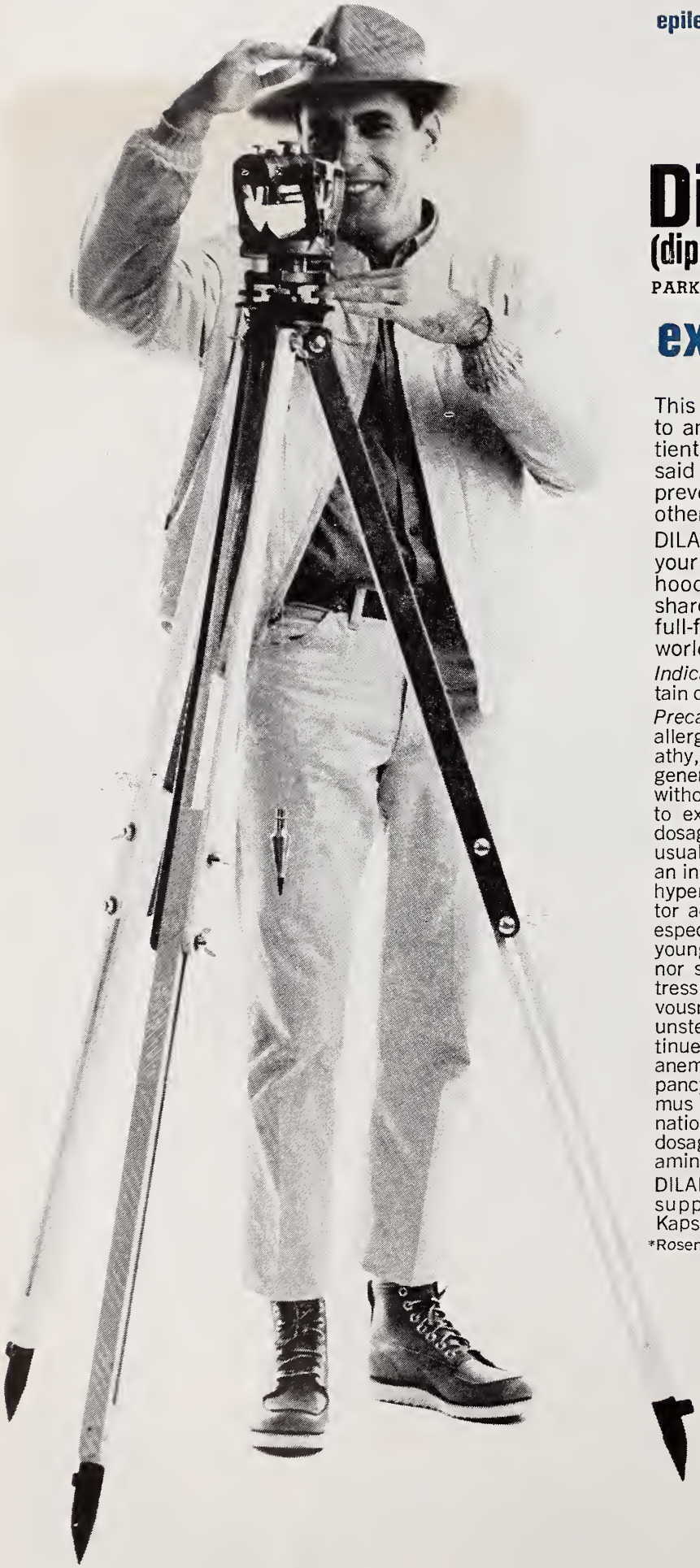

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*Roseman, E.: *Neurology* **11**:912, 1961. 33664

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MARCH 1964 *Volume 53, Number 3*

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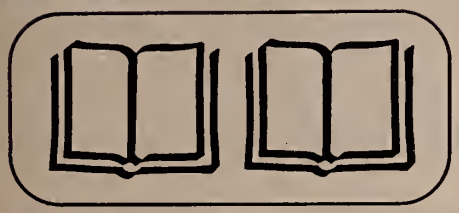
110TH ANNUAL SESSION



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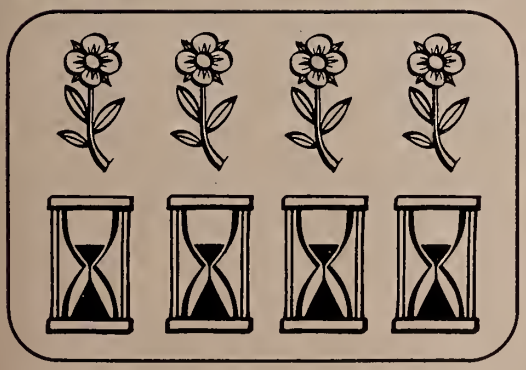

MAY 3-6 1964

For Your MAG 1964 Annual Session Hotel & Motel Reservations

APPLICATION FOR HOTEL AND MOTEL ACCOMMODATIONS

Medical Association of Georgia 110th Annual Session

May 3, 4, 5, and 6, 1964 — Macon, Georgia

A HOUSING BUREAU has been established for your convenience in making hotel and motel reservations at Macon for the 1964 Annual Session of the Medical Association of Georgia. Comparable room rates and accommodation information are listed. *Use the Reservation Form below.* Please specify your first, second and third choice hotel or motel. All requests for reservations should give: (1) anticipated date and hour of arrival; (2) date and approximate hour of departure; (3) names and addresses of all persons who will occupy the accommodations. All reservations must be cleared through the Housing Bureau. Since all requests for rooms will be handled in chronological order, you should mail your application as early as possible to secure the accommodations you request. All reservations will be confirmed.

Dempsey Motor Hotel: 515 Cherry St. (SH. 2-2511). **Single $6 up, double $8 up, twin beds $9 up.** Air conditioned, 4 channel TV, 4 channel radio, background music, Eastern & Delta Airlines ticket office, limousine terminal, two restaurants, pet kennel, free inside parking, motor arcade, adjoining shops and stores, barber and beauty shop, in heart of downtown Macon. Special group rates.

Alpine Lodge: 1990 Riverside Dr. (SH. 6-6221). Members Quality Court, Inc., AAA. Wall to wall carpet, room control heat and air conditioning, 24 hr. service, TV in all rooms, tub and shower combination, Davis House of Fine Foods, swimming pool, **single room $7, double $9.50, twin $11.50.** Family rate on week-ends. Meeting rooms — capacity 200.

Ambassador Motel: 2772 Riverside Dr. (SH. 2-3687). Member AAA, Superior Courts, 5 minutes from downtown Macon. 63 rooms, **twin $10.50.** Convention room seating 300, restaurant seats total 580 — open 6 a.m. to 10 p.m. — catering to sales and convention groups. Fully air conditioned, TV, phones, pool.

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Magnolia Court & Grill: 4739 Houston Rd., (788-3042). **Single $4 up, double $6 and up, 3 persons $8 and up, 4 persons $9 and up.** Telephone, air conditioning, swimming pool, restaurant.

Pinebrook Inn: 4420 Forsyth Rd. (SH. 5-0429). **Single $5.50, double $7, twin $8, three $9, four $10.** TV in all rooms, swimming pool. Breakfast 8 to 9 a.m., dinner 5:30 p.m. until 1 a.m., 20 units.

Town Pavilion Motor Hotel: Walnut and Broadway, downtown Macon. (746-8121) (TWX MC 5008). **Single $7, double $9, twin bedroom $11 to $12, studio room $8.50 single, $11.50 double.** Air conditioned, TV, radio, background music, pool, direct dialing telephones, S & S Cafeteria, Perdita's Restaurant.

Confirmation of your request for accommodations will be in accordance with preference indicated, if possible; if not, best substitute will be made. Deposit of one day's room rent will be required with each request for accommodations.

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THE NAME OF EACH HOTEL GUEST MUST BE LISTED. Include all names of all persons for whom you are requesting reservations and who will occupy the room(s):

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_____	_____
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Individual Requesting Reservations

Name _____

Address _____

City _____ State _____

Zip Code _____

If hotels or motels of your choice are unable to accept your reservations, the Housing Bureau will make reservations to fit your specifications elsewhere.

110th Annual Session Official Call

Extended to All Officers and Members of the Medical Association of Georgia

Specific Information

THE OFFICIAL CALL for the Medical Association of Georgia 110th Annual Session is hereby extended to all Association members. This four-day meeting will be convened May 3, 4, 5 and 6, 1964, at the Macon Auditorium, Macon, Georgia. The Association will conduct scientific sessions and general business meetings, and the House of Delegates will be convened for their annual meeting. Scientific and Commercial exhibits will be on display in the Macon Auditorium adjacent to the Main Meeting Room. Social events for the membership have been planned and many of the Specialty Societies will have their own luncheon and dinner meetings. The Woman's Auxiliary to the Medical Association of Georgia will hold their 39th Annual Meeting in conjunction with the Association Annual Session at the Dempsey Hotel in Macon.

Registration

The Medical Association of Georgia Official Registration Desk will be located at the Main Entrance of the Macon Auditorium. The Registration Desk will be adjacent to the single entrance and exit for the Scientific Exhibits display, the Commercial Exhibits display, and the Scientific and Business Meeting Rooms in the Macon Auditorium.

The Registration Desk will be open for the registration of MAG members and guests on Sunday, May 3 from 1:00 P.M. to 6:00 P.M.; Monday, May 4 from 8:00 A.M. to 12:00 NOON; Tuesday, May 5 from 8:00 A.M. to 5:00 P.M. and on Wednesday, May 6 from 8:00 A.M. to 12:00 NOON.

MAG members and guests are requested to register at the MAG Registration Desk *immediately on arrival* at the Auditorium to obtain badges and programs. No one will be admitted to the Exhibit Halls, Meeting Rooms or other MAG functions without MAG Official registration badges.

MAG Scientific Meetings

MAG Scientific Section and Joint Section Meetings are scheduled for Sunday afternoon, May 3 from 3:00 P.M. to 5:30 P.M.; Monday morning, May 4 from 10:00 A.M. to 12:00 NOON; Tuesday morning, May 5 from 9:00 A.M. to 11:00 A.M. and again Tuesday afternoon, May 7 from 2:30 P.M. to 5:00 P.M. There will be no Official MAG Section or Joint Section meetings scheduled for Monday afternoon, May 4. Specific Section or Joint Section Meetings and Meeting Rooms are noted in the MAG Program Resume, to follow, and in the complete program on page 86.

MAG General Business Sessions

The Association will convene its First General Business Session on Sunday afternoon, May 3 at 2:00 P.M. in the Main Meeting Room, Macon Auditorium. At this time nominations to MAG Offices and for MAG Awards will be presented. The Second General Business Session will be held Monday, May 4 at 12:00 NOON in the Main Meeting Room of the Macon Auditorium at which time the outgoing MAG President will make his report to the membership, and the incoming MAG President will outline his program for 1964-65. The Third General Business Session is set for Wednesday, May 6 at 10:30 A.M. in the Main Meeting Room, Macon Auditorium. At this final scssion, MAG Awards will be presented, new officers installed and the entire Annual Session will be adjourned at approximately 12:00 NOON.

MAG House of Delegates

The First Session of the MAG House of Delegates will be convened on Monday morning, May 4 at 9:00 A.M. in the Main Meeting Room of the Macon Auditorium. At this session all reports and resolutions will be introduced to the House for referral to Reference Committee.

House of Delegates Reference Committee all will meet concurrently on Monday afternoon, May 4 at 2:30 P.M. in the Main Meeting Room of the Macon Auditorium. Delegates and all MAG members are urged to attend Reference Committee meetings so that they may makc their views known to assist these Committees in their delibcrations on those items of business before the Association House of Delegates.

The Second Session of the House of Delegates will convene on Wednesday morning, May 6 at 9:00 A.M. in the Main Meeting Room of the Macon Auditorium. At this final session, the House Reference Committees will report their recommendations and the House will vote on all business introduced to the House.

Delegates are urged to attend both sessions of the House so that they will truly represent their county medical society—as they were so elected to do. *All Delegates are requested to attend both of the sessions of the House at least 15 minutes prior to the time they convene so that Delegates may be registered without delay of the meetings.* Registration of the MAG Delegates will be conducted at a SPECIAL DELEGATES REGISTRATION DESK just at the entrance to the Main Meeting Room 30 minutes prior to the convening of both sessions of the House. During this registration, MAG Delegates' Credentials Cards will be checked by the House Credential Committee and special badges will be given Delegates. These special badges certify the Delegate's right to vote during sessions of the House.

MAG Message Center

A Message Center will be maintained at the MAG Official Registration Desk for the convenience of the membership. Pages from the Woman's Auxiliary to the MAG will staff this center during the entire session. An Official Bulletin Board at the Message Center will be available for notices.

MAG Headquarters Office and Press Room

The Association Headquarters Office Staff will maintain a Headquarters Office Room at the Macon Auditorium for the purpose of staff secretarial activity in conjunction with the conduct of Association business during the meeting.

An MAG Press Room will also be available for newspaper, radio and T.V. media personnel during the entire Annual Session. The Press Room will be maintained at the Macon Auditorium adjacent to the Auditorium entrance.

MAG Memorial Service

The Medical Association of Georgia will hold its annual Memorial Service at the First General Business Session on Sunday afternoon, May 3, at 2:00 P.M. in the Main Meeting Room, Macon Auditorium. All members and guests are cordially invited to attend this service which is held in memory of the members who have died during the past year. The event will honor the service and contributions of the following medical practitioners:

I. G. Armistead, Townsend, July 3, 1963
L. A. Bailey, Milledgeville, August 11, 1963
H. L. Barker, Carrollton, September 14, 1963
B. B. Barmore, Jr., Thomaston, January 14, 1964
D. P. Belcher, Pelham, April 13, 1963
E. L. Bishop, Atlanta, August 12, 1963
Bingley L. Burdick, Valdosta, August 22 ,1963
W. C. Dabney, Ocean Springs, Mississippi, January 14, 1964
W. A. Davis, August 30, 1963
A. H. Fowler, Marietta, December 8, 1963
Lon W. Grove, Atlanta, October 9, 1963
Nim J. Guthrie, Atlanta, September 23, 1963
H. C. Holliday, Athens, March 6, 1963
R. L. Johnson, Douglas, May 14, 1963
A. J. Kelley, Savannah, July 5, 1963
Polk S. Land, Columbus, August 7, 1963
J. A. Leaphart, Jesup, April 24, 1963
Robert C. Major, Augusta, May 13, 1963
Thomas V. Matthews, Atlanta, August 23, 1963
W. E. Mayher, Columbus, May 25, 1963
Ricardo Nestre, Marietta, August 5, 1963
R. C. Montgomery, Butler, November 10, 1963
Frank K. Neill, Albany, July 7, 1963
Charles E. Pattillo, Decatur, December 16, 1963
J. B. Peniston, Newnan, October 19, 1963
W. F. Reavis, Eustis, Florida, August 16, 1963
J. C. Rollins, College Park, October 22, 1963
H. J. Rosenberg, Atlanta, May 31, 1963
Warren M. Russell, Augusta, January 11, 1964
Dan Y. Sage, Atlanta, December 31, 1963
A. W. Simpson, Washington, November 12, 1963
Otis A. Sims, Dalton, May 4, 1963
Melvin Ernest Smith, Milledgeville, December 18, 1963
C. E. Stapleton, Statesboro, November 10, 1963
John A. Thurston, Atlanta, June 8, 1963
J. W. Wallace, Douglas, February 9, 1964
E. W. Watkins, Ellijay, October 30, 1963

Specialty Society Meetings, Luncheons and Dinners

Specialty Societies have planned meetings, luncheons and dinners for the membership of their organizations to be held in conjunction with the MAG Annual Session. These events are listed in the Official MAG Program in the order of the date and the time the event is scheduled—under *Social Events.* As these sessions are limited to the membership of the specialty society sponsoring the affair, they are not considered a part of the Official MAG Program.

Woman's Auxiliary to MAG

The Woman's Auxiliary to the Medical Association of Georgia will convene their 39th Annual Meeting in conjunction with the MAG Annual Session. The Auxiliary Registration Desk and meetings will be in the Dempsey Hotel. The complete program giving times, dates and locations of Auxiliary meetings, activities and functions will be found in this issue immediately following the program material of the MAG.

Social Events

Information about social events planned in conjunction with the MAG Annual Session and the necessary admission tickets will be available at the MAG Official Registration Desk. As accommoda-

tions for such social events are limited, *your cooperation in purchasing tickets at the time of your registration is requested.* The traditional Alumni banquets and other banquet tickets may be arranged at the Registration Desk.

Scientific Exhibits

Scientific Exhibits will be displayed adjacent to the Commercial Exhibits in the Macon Auditorium. The Scientific Exhibits are prepared by physicians who will be at their exhibits to discuss these presentations with the membership. All physicians are urged to visit each Scientific Exhibit in the interests of professional education. Awards for outstanding Scientific Exhibits will be presented at the MAG Final General Business Session on Wednesday, May 6, at 10:30 A.M. in the Main Meeting Room, Macon Auditorium.

Commercial Exhibits

Approximately 45 Commercial Exhibits will be displayed in exhibit booths in the entrance to the Main Meeting Hall of the Macon Auditorium. These exhibits will provide technical information of importance on the latest products and services available to the medical profession.

It is extremely important that every member visit each of these exhibits and register with the exhibitor. Your cooperation is requested since these displays are designed and shown specifically to benefit the profession.

The Commercial Exhibitor plays an extremely important role in making the MAG Annual Session possible and the Association Commercial Exhibits Committee strongly urges your participation in this area of MAG activity. *Please be sure to visit each and every Commercial Exhibit booth.* A list of the Commercial Exhibitors already participating at this time in the MAG Annual Session is as follows:

Booth Space	*Name of Firm*
A	The Medequip Corp., Distributors for Medco Products Co., East Point, Ga.
B	The Coca-Cola Company, Atlanta, Ga.
1	The Life Insurance Company of Georgia, Atlanta, Ga.
2	The Borden Company, Pharmaceutical Division, New York, N. Y.
3	William P. Poythress & Company, Inc., Richmond, Va.
4	Abbott Laboratories, North Chicago, Ill.
5	Encyclopedia Britannica, Chicago 11, Ill.
6	Warren-Teed Pharmaceuticals, Inc., Columbus, Ohio
8	Davies, Rose & Company, Ltd., Boston, Mass.
13	Ortho Pharmaceutical Corporation, Raritan, N. J.
14	Sandoz Pharmaceuticals, Hanover, N. J.
15	Gerber Products Company, Fremont, Mich.
17	Carnation Company, Los Angeles, Calif.
19	Eli Lilly and Company, Indianapolis, Ind.
23	Warner-Chilcott, Morris Plains, N. J.
24	Pfizer Laboratories, New York, N. Y.
25	Schering Corporation, Bloomfield, N. J.
26	Merck Sharp & Dohme, West Point, Pa.
28	Physicians Products Co., Inc., Petersburg, Va.
30	A. H. Robins Company, Inc., Richmond, Va.
35	The Upjohn Company, Kalamazoo, Mich.
38	U. S. Vitamin & Pharmaceutical Corp., New York, N. Y.
40	Wallace Laboratories, Cranbury, N. J.
42	Knoll Pharmaceutical Company, Orange, N. J.
43	Ciba Pharmaceutical Company, Summit, N. J.
46	Dictaphone Corporation, New York, N. Y.
47	G. D. Searle & Company, Chicago, Ill.
48	Dome Chemicals, Inc., New York, N. Y.
49	Estes Surgical Supply Company, Atlanta, Ga.
50	Geigy Pharmaceuticals, Yonkers, N. Y.
52	Parke, Davis & Company, Detroit, Mich.

Smith, Kline & French Laboratories contributed $100 to assist in expenses. The address is 1500 Spring Garden Street, Philadelphia 1, Pa.

Fifty-Year Members

Physicians who have practiced medicine for 50 years will be honored at the MAG Annual Session by the award of a 50-Year Pin and Certificate. These awards will be presented at the MAG final General Business Session on Wednesday, May 6 at 10:30 A.M. in the Main Meeting Room, Macon Auditorium. The following list contains the names of all of the members of the Medical Association of Georgio who, as of the year 1964, have practiced medicine for 50 years. It does not record the names of physicians who have already received gold membership cards. This is the class of 1914 as follows:

Edwin Whitaker Allen . . . . . Milledgeville
Leland Green Baggett . . . . . Atlanta
Benjamin T. Beasley . . . . . Oakwood
John Robert Childs . . . . . Atlanta
George Washington Fuller . . . . . Atlanta
John A. Hunnicutt . . . . . Athens
James A. Johnson . . . . . Manchester
Luther Hilliard Kelley (Deceased) . . . Atlanta
Robert Edwin McClure . . . . . Atlanta
Mixson, Joyce Ferdinand (Deceased) . . Valdosta
Robert C. Montgomery . . . . . Butler
James Calvin Morgan . . . . . West Point
Jos. Jephtha Nutt . . . . . Bowdon
Charles Edward Rushin . . . . . Atlanta
Wesley C. Thomas . . . . . Brunswick
John A. Thurston (Deceased) . . . . Atlanta

MAG PROGRAM RESUMÉ

Sunday, May 3

2:00 P.M. MAG General Business Session, *Main Meeting Room, Macon Auditorium*

3:00 P.M. Pediatrics, Psychiatry, Dermatology and Public Health Joint Section Meeting, *Main Meeting Room, Macon Auditorium*

3:00 P.M. Radiology, Chest and Orthopedics Joint Section Meeting, *Kilowatt Room, Georgia Power Building.*

Monday, May 4

9:00 A.M. MAG First Session House of Delegates, *Main Meeting Room, Macon Auditorium*

10:00 A.M. Diabetes, Medicine, Heart, Pathology and Surgery Joint Section Meeting, *Main Meeting Room, Macon Auditorium*

10:00 A.M. Anesthesiology and Obstetrics & Gynecology Joint Section Meeting, *Main Meeting Room, Georgia Power Building*

10:00 A.M. Urology, EENT and Public Health Joint Section Meeting, *Civic Room, Macon Auditorium*

12:00 NOON MAG General Business Session, *Main Meeting Room, Macon Auditorium*

2:30 P.M. MAG House of Delegates Reference Committee No. 1, No. 2, No. 3, No. 4 and No. 5 Meetings, *Main Meeting Room, Macon Auditorium*

Tuesday, May 5

9:00 A.M. MAG General Scientific Session (G.P. Day), *Main Meeting Room, Macon Auditorium*

11:30 A.M. Georgia Medical Political Action Committee General Meeting, *Main Meeting Room, Macon Auditorium*

2:30 P.M. Medicine, Heart and Pathology Joint Section Meeting, *Main Meeting Room, Macon Auditorium*

2:30 P.M. Diabetes, Surgery and Obstetrics & Gynecology Joint Section Meeting, *Kilowatt Room, Georgia Power Building*

Wednesday, May 6

9:00 A.M. MAG Second Session House of Delegates, *Main Meeting Room, Macon Auditorium*

10:30 A.M. MAG Final General Business Session, *Main Meeting Room, Macon Auditorium.*

1964 Annual Session Section Chairmen

ANESTHESIOLOGY
Earl S. Avant, M.D.
781 Spring Street, Macon

CHEST
Sam E. Patton, M.D.
797 Poplar Street, Macon

DIABETES
H. C. Atkinson, M.D.
724 Hemlock Street, Macon

DERMATOLOGY
Richard B. Ewing, M.D.
643 Orange Street, Macon

GENERAL PRACTICE
Charles E. Bohler, M.D.
Box 8, Brooklet

MEDICINE
Henry H. Tift, M.D.
765 Spring Street, Macon

HEART
Thomas L. Ross, M.D.
700 Spring Street, Macon

OBSTETRICS AND GYNECOLOGY
Gordon W. Jackson, M.D.
740 Hemlock Street, Macon

OPHTHALMOLOGY AND OTOLARYNGOLOGY
W. D. Jarrat, M.D.
629 First Street, Macon

ORTHOPEDICS
L. Clyde Sheehan, Jr., M.D.
671 Hemlock Street, Macon

PATHOLOGY
Leonard H. Campbell, M.D.
548 First Street, Macon

PEDIATRICS
John P. Jones, M.D.
885 Pine Street, Macon

PSYCHIATRY
Thomas M. Hall, M.D.
752 Hemlock Street, Macon

RADIOLOGY
Robert F. Cato, M.D.
722 First Street, Macon

SURGERY
J. P. Woodhall, M.D.
724 Hemlock Street, Macon

UROLOGY
Robert W. McAllister, M.D.
811 Orange Terrace, Macon

PUBLIC HEALTH
T. Oscar Vinson, M.D.
DeKalb City Health Department, Decatur
Robert J. Walker, M.D.
Macon-Bibb County Health Department, Macon

CALL FOR SCIENTIFIC EXHIBITS

110TH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA

Macon, Georgia, May 3-6, 1964

For Information and Applications, Write to:

Edgar D. Grady, M.D., Chairman, MAG Scientific Exhibits Committee
938 Peachtree Street, N.E. • Atlanta, Georgia 30309

GUEST SPEAKERS

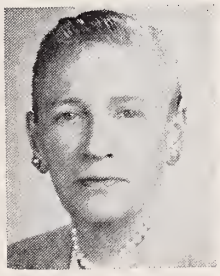
MORRIS WAISMAN, M.D.

Tampa, Florida

MORRIS WAISMAN, M.D., Tampa, Florida, and Visiting Clinical Assistant Professor, University of Miami School of Medicine, will present his paper, "Pickers, Pluckers and Pretenders, A Panorama of Cutaneous Self-Mutilation," to the Pediatrics, Psychiatry, Dermatology and Public Health Joint Section Meeting on Sunday, May 3, at 3:00 P.M.

Dr. Waisman received his medical degree from the University of Illinois College of Medicine and his M.S. in Dermatology from the Mayo Clinic, Rochester, Minnesota. A brief abstract of his paper follows:

> Self-inflicted lesions of the skin vary in significance from those attributable to overzealous "treatment" of an existing eruption to severely destructive lesions produced either consciously to deceive or as an outright schizophrenic disturbance.
>
> Patterns of pathologic self-mutilation of skin, oral mucous membrane, hair and nails will be surveyed together with an appraisal of their concomitant abnormal psychologic reactions. Also will be reviewed dermatoses, whose features sometimes make them vulnerable to the erroneous diagnosis of factitial dermatitis.



CAROLINE A. CHANDLER, M.D.

Bethesda, Maryland

"Well Baby Care: Untapped Portal of Entry to Family Care," is the topic of the paper to be presented by CAROLINE A. CHANDLER, M.D., on Sunday, May 3, at 4:00 P.M. to the Pediatrics, Psychiatry, Dermatology and Public Health Joint Section Meeting. Dr. Chandler, of Bethesda, Maryland, received her medical degree from Yale University School of Medicine, served an internship at the New Haven Hospital, New Haven, Connecticut, and was then an Assistant, Medical Service, at The Children's Hospital, Boston, Massachusetts. She is at present Assistant Professor of Pediatrics, Johns Hopkins School of Medicine, Johns Hopkins Hospital, Baltimore; and Instructor in Mental Hygiene, Johns Hopkins School of Hygiene and Public Health, Baltimore. She is a member, among others, of the British Royal Society of Health, the American Orthopsychiatric Association and the American Psychiatric Association. She is listed in Who's Who in America and Who's Who Among American Women.

Following is a brief summary of Dr. Chandler's paper:

> Routine care of the well baby is standard practice today, whether given by private pediatricians, general practitioners or in public well baby clinics. This routine care or health supervision too often consists of a hasty physical examination or inspection, and a "shot" interspersed with a few words tossed at the mother re feeding, vitamins and whatnots—all in a "visit" of five minutes or less!
>
> The author's thesis, based on experience in both private and public settings over many years is that a golden opportunity to gain access to "family practice" is being lost by this perfunctory type of well baby care. If well baby care were seen as a "portal of entry" to the physical and mental health care of the whole family, then this kind of perfunctory service would be replaced with the kind of high quality medical care and family counseling that we as physicians are now capable of delivering.
>
> (The author will suggest some ways of utilizing this portal of entry and give some examples based on her own experience.)

JOHN B. BLALOCK, M.D.

New Orleans, Louisiana

JOHN B. BLALOCK, M.D. of New Orleans, Louisiana, will speak to the Joint Section Meeting on Radiology, Chest and Orthopedics on Sunday, May 3, at 3:00 P.M. The title of Dr. Blalock's paper will be "Complications of Endoscopy," a brief abstract of which follows:

> The low incidence of major complications of endoscopy would seem to render such sequela of minor concern. However, these complications gain great significance because of the large number of endoscopies being done and the gravity of the complications when they do occur. The types of complications from anesthesia and instrumentation are discussed with regard to cause, recognition and treatment. Examples of most of the major types of complications of bronchoscopy and esophagoscopy are illustrated by brief case reports with accompanying slides of X-ray films. The need for consciousness of the possibility of complications and proper therapy when they occur is emphasized.

Dr. Blalock is a graduate of the University of Pennsylvania School of Medicine and is at present Assistant Professor of Surgery, Tulane University School of Medicine, and a member of the Ochsner

Clinic Staff, Departments of Surgery and Thoracic Surgery, New Orleans. He is a member of the staff of the Ochsner Foundation Hospital, and Senior Visiting Surgeon, Charity Hospital of Louisiana at New Orleans.

CHESTLEY L. YELTON, M.D.

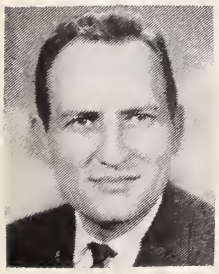
Birmingham, Alabama

CHESTLEY L. YELTON, M.D., Birmingham, Alabama, will present a paper entitled, "Injuries About the Ankle," at 3:30 P.M., Sunday, May 3, to the Radiology, Chest and Orthopedics Joint Section Meeting. Dr. Yelton is presently Professor of Orthopedic Surgery and Chairman of the Division of Orthopedic Surgery at the Medical College of Alabama, Birmingham; and Chief of Orthopedic Service, University Hospital, Birmingham. He is a graduate of the University of Louisville Medical School and served his internship and residency at Employees' Hospital, Fairfield, Alabama. He is a fellow of the American College of Surgeons, the American Academy of Orthopedic Surgeons, and the Southeastern Surgical Congress. He is a consultant to the Alabama State Crippled Children's Service and to the Alabama State Rehabilitation Service.

A brief summary of his paper follows:

This paper is concerned with recent injuries to the ankle as regards their mechanisms, classification and treatment. Early effective surgery is the secret of success in many types of fractures about the ankle with joint irregularity and gross displacement, as the more accurate the reduction, the more perfect should be the end result. However, there are a few injuries to the ankle that should be relatively seldom, if ever, treated surgically.

Accurate diagnosis and analysis of every ankle injury are essential in order to plan the type of treatment, whether it be open or closed, which will offer the shortest morbidity and achieve the least permanent impairment. The pros and cons of the merits of open or closed treatment of these injuries are depicted by cases presented in the paper.



JEROME F. WIOT, M.D.

Cincinnati, Ohio

"Unusual Manifestations of Well-Known Chest Diseases," is the title of the paper to be presented to the Radiology, Chest and Orthopedics Joint Section Meeting on Sunday, May 3, at 4:00 P.M. by JEROME F. WIOT, M.D. of Cincinnati, Ohio.

Dr. Wiot is a graduate of the University of Cincinnati College of Medicine and served his internship and residency at Cincinnati General Hospital. He is at present Associate Director of the Department of Radiology, Cincinnati General Hospital; and Consulting Radiologist at Cincinnati V.A. Hospital. He is a Diplomate of the American Board of Radiology and a member of the Radiological Society of North America, the American College of Radiology and the Association of University Radiologists. Dr. Wiot is the author of a number of scientific papers and has several new ones now in press.

A summary of his Annual Session paper follows:

The pulmonary manifestations of systemic disease often present characteristic radiographic findings. However, at times the findings may be rather unusual. It is important to recognize these cases so that patients are not subjected to unnecessary diagnostic and therapeutic procedures nor denied necessary ones. Knowledge that these unusual patterns exist and careful attention to radiologic principles may enable us to recognize them.

WILLIAM BOYD, M.D.

Toronto, Ontario, Canada

Canadian pathologist, WILLIAM BOYD, M.D., of Toronto, will present two papers at the MAG 110th Annual Session. The first, "The Geography of Disease," will be given Monday, May 4, at 10:30 A.M. to the Diabetes, Medicine, Heart, Pathology and Surgery Joint Section Meeting; and the second, to be presented to the GP Day - General Session at 10:25 A.M. on Tuesday, May 5, will be entitled, "The Development of Cellular Pathology."

Abstracts of each paper follow:

The Geography of Disease

Geographic pathology is a term which connotes a concept of great practical importance and of extreme theoretical interest, one which has received too little attention in the past and which provides a constant challenge to the inquiring mind.

Why should a disease be common in one locality and rare in another? The answer may be almost childishly obvious, it may be difficult, or it may be quite beyond us. Illustrative examples of these various groups will be discussed.

The Development of Cellular Pathology

Although from the very beginning Rudolph Virchow, the father of cellular pathology, laid emphasis on disturbance of function, for many years the attention of pathologists was concentrated on the changes in structure produced by disease. Now that the infinite

complexity of cellular structure has been revealed by the electron microscope and cytochemical technique, attention has again been focused on disturbance of function, which alone is responsible for the symptoms of the sick person who seeks help from the doctor.

Dr. Boyd was graduated from the University of Edinburgh, Scotland, and received his diploma in Psychiatry in 1912. He has served as Professor of Patholgy at the University of Manitoba, Winnipeg, 1916-1937; at the University of Toronto, 1937-1951; the University of British Columbia, Vancouver, B.C., 1951-1954; and as Visiting Professor of Pathology at the University of Alabama Medical Center, Birmingham, from 1955-1963. He is Past-President of the American Association of Pathologists and Bacteriologists, and of the International Association of Medical Museums (now the International Academy of Pathology).

EDWARD R. WOODWARD, M.D.

Gainesville, Florida

Speaking to the Diabetes, Medicine, Heart, Pathology and Surgery Joint Section Meeting at 11:00 A.M., Monday, May 4, will be EDWARD R. WOODWARD, M.D. of Gainesvlle, Florida, whose subject will be "Pathophysiology and Treatment of Hiatal Hernia and Esophagitis." Following is an abstract of his presentation:

The squamous epithelium of the esophagus is exquisitely sensitive to the proteolytic action of acid-pepsin. Thus, the physiologic separation of stomach from esophagus is of great importance. Recent studies indicate that an intrinsic sphincter mechanism at the esophagal gastric junction plays an important role in this separation.

The sliding type of esophageal hiatal hernia ablates the esophagal gastric sphincter and permits free reflux of gastric juice into the esophagus resulting in peptic esophagitis. Surgical repair of esophageal hiatus hernia frequently fails to control the clinical syndrome of esophagitis.

Forty-five patients have been studied before and after surgery for hiatal hernia and associated esophagitis. pH measurements indicate that gastroesophageal reflux is still present postoperatively in nearly 50 per cent of the cases. Ancillary surgery consisting of either pyloroplasty or vagotomy plus pyloroplasty seems to result in a lower incidence of postoperative reflux and preliminary clinical results seem to be somewhat better.

It is concluded that hiatal hernia repair alone frequently fails to restore the competence of the esophagal gastric sphincter mechanism. In essence, peptic esophagitis is peptic ulcer disease in another anatomic location. Ancillary surgery is designed to: (1) hasten gastric emptying and (2) diminish gastric acid secretion seem to improve the results of surgical treatment for this disease.

Dr. Woodward received his M.D. degree from the University of Chicago School of Medicine and served his internship at University of Chicago clinics. From 1953-1957 he served as Assistant and Associate Professor of Surgery at the University of California Medical Center, Los Angeles. He is presently serving as Professor and Head of the Department of Surgery, University of Florida College of Medicine, Gainesville. He is a member, among others, of the Society of University Surgeons and the International Society of Surgery, a Fellow of the American College of Surgeons, and a Diplomate of the American Board of Surgery, and a member of the Editorial Boards of the *American Journal of Digestive Diseases,* the *American Surgeon,* and *Surgery.*

LEO P. KRALL, M.D.

Boston, Massachusetts

LEO P. KRALL, M.D. of the Joslin Clinic, Boston, Massachusetts, will present two papers to the Annual Session. The first, entitled, "New Thoughts About An Old Disease, Diabetes Mellitus," will be given Monday, May 4, at 11:30 A.M., to the Diabetes, Medicine, Heart, Pathology and Surgery Joint Section Meeting, and the second, "Solved and Unsolved Problems of Diabetes Management," will be presented to the Diabetes, Surgery and Obstetrics and Gynecology Joint Section Meeting at 4:00 P.M., Tuesday, May 5. Summaries of each paper follow:

New Thoughts About An Old Disease, Diabetes Mellitus

Until recently it has been thought that the diagnosis of diabetes mellitus began with the classical symptoms of polyuria, polydipsia and polyphagia. Gradually, with the new awareness of subclinical diabetes and prediabetes, has come recognition that this condition may start at birth and that the problems which will become so apparent later may have started before the physician is even remotely aware of their existence. Two known influences on diabetes, (1) heredity and (2) obesity, are largely responsible for the tremendous increase in this condition. Recently details of the various insulin structures have been learned, and many of these have been synthesized. Ultimately it is hoped that this synthesis will lead to a true oral insulin to replace the many oral hypoglycemic compounds now in use. Many studies now in progress indicate a high degree of antibody formation or other resistance which may be rendering our present forms of insulin suboptimally effective.

Solved and Unsolved Problems of Diabetes Management

The discovery of insulin in 1921 was the first great revolution in the treatment of diabetes. Many thousands who died of acute complications now lived to life spans comparable with the normal. However, this

ushered in a new era of chronic complications and sequelae of degeneration.

The second therapeutic revolution is still in progress. It started with the recognition of earlier diabetes diagnosis, the advent of oral hypoglycemic compounds and the recent research developments in the basic nature of diabetes and insulin.

The acute manifestations of diabetes such as acidosis, hypoglycemic reactions, infection, etc., can most often be controlled. The management of the longer-term problems such as retinopathy, nephropathy, neuropathy and cardiovascular degeneration is more difficult. Of more practical importance are those involving the care of obstetrical and surgical situations. These will be discussed.

Dr. Krall received his medical degree from Loma Linda University School of Medicine and also served as an instructor at the medical school. He has served as Assistant Chief, Diabetes Control Unit, U.S. Public Health Service, and as Deputy Chief of Medicine, U.S. Marine Hospital, Norfolk, Virginia. He is presently a member of the Senior Staff, Joslin Clinic and New England Deaconess Hospital, Boston. He is a Consultant to the Boston Lying-in Hospital, Danvers State Hospital and the U.S. Public Health Service Diabetes Program, Boston, and the Old Age Study Center, Tewksbury, Massachusetts.

FRANK MOYA, M.D.

Miami, Florida

FRANK MOYA, M.D., Professor and Chairman of the Department of Anesthesiology, University of Miami School of Medicine and Jackson Memorial Hospital, Miami, Florida, will present a paper entitled, "The Placental Transfer of Drugs," to the Anesthesiology and Obstetrics and Gynecology Joint Section Meeting on Monday, May 4, at 10:30 A.M. In addition to the above position, Dr. Moya is also Consultant in Anesthesiology at the VA Hospital, Coral Gables, and the United States Naval Hospital at Key West. Prior to his association with the University of Miami, he was Assistant Professor at Columbia University College of Physicians and Surgeons for four and one-half years.

Dr. Moya's special research interest is in the area of anesthesia for obstetrics and maternal and newborn physiology. As Director of the Anesthesiology Service at the Sloane Hospital for Women of the Columbia Presbyterian Medical Center in New York City, he became the foremost authority in the field. He is the author of numerous scientific articles on anesthesia, obstetrics and emergency care of the newborn. In addition, he has been a contributor to several textbooks and has lectured on these subjects throughout most of the United States and many foreign countries.

A summary of Dr. Moya's presentation follows:

The classic concept of the placenta as a simple, passive semipermeable filter is no longer tenable in the light of present knowledge. In a review of the transfer of naturally occurring materials, Page suggested that the important question is not whether a given substance does or does not pass the so-called placental barrier but the rate and mechanism of transfer involved. It is now believed that any substance found in the maternal or fetal blood should be able to penetrate the placenta to some extent unless it is destroyed or altered during passage. However, a very low degree of permeability may slow the entry to a rate which renders a drug physiologically inactive and pharmacologically undetectable.

Practically all drugs used in obstetrics have been found to cross the placenta to some degree. The muscle relaxants appear to be notable exceptions. However, even with these compounds there is a relative rather than an absolute placental barrier, because with an extremely high concentration gradient they, too, will appear in fetal blood.

Foreign substances cross the placenta by simple diffusion and as though the boundary had the characteristics of a lipoid barrier. Therefore, as with the blood brain barrier, the rate of entry is primarily governed by the fat solubility of the non-ionized drug molecule. Other factors such as concentration gradient and molecular weight, are usually of secondary importance. The establishment of a lipoid theory for the placenta would appear to frustrate the perennial quest for a systemic agent that could relieve maternal pain and yet not cross the placenta, since fat soluble drugs would penetrate both the blood brain and the blood placental barrier.

E. J. QUILLIGAN, M.D.

Cleveland, Ohio

E. J. QUILLIGAN, M.D., Cleveland, Ohio, is presently Chairman of the Department of Obstetrics and Gynecology of the Metropolitan General Hospital, Cleveland. He will present two papers: the first to the Anesthesiology and Obstetrics and Gynecology Joint Section Meeting at 11:00 A.M., Monday, May 4, entitled, "The Uses and Abuses of Fetal Heart Determination in Labor;" and the second, entitled, "The Significance of Bacteria in the Urinary Tract During Pregnancy," at 2:50 P.M., Tuesday, May 5, to the Diabetes, Surgery and Obstetrics and Gynecology Joint Section Meeting.

Dr. Quilligan received his medical degree from Ohio State University Medical School, and served his internship and residency at Ohio State University Hospitals, Columbus, Ohio, and Western Reserve

University, Cleveland. He has served as an instructor and Assistant Professor of Obstetrics and Gynecology at Western Reserve University prior to his present position. Dr. Quilligan's principal research interest has been in maternal and fetal physiology, and he is at present primarily engaged in evaluation of the metabolic status of infants at the time of birth in correlation with the changes in fetal heart rate which have occurred during labor.

Abstracts of Dr. Quilligan's two scientific presentations appear below:

The Uses and Abuses of Fetal Heart Determinations in Labor

The fetal heart rate as an indicator of the intrauterine status of the fetus has been utilized for many years. Recent developments of electronic technique have permitted the continuous monitoring of the fetal heart rate during labor and delivery. The present study was designed to attempt to evaluate changes occurring in the fetal heart rate during labor with the oxygenation and acid base balance of the fetus at the time of delivery. Some perimeters of what is considered to be a normal variation in the fetal heart rate and pathologic variation in the fetal heart rate will be presented.

The Significance of Bacteria in the Urinary Tract During Pregnancy

Since Kass' work on bacilluria in the pregnant female, many investigators have been concerned with the subject and the possible adverse relationships that bacilluria in the pregnant female may have to chronic renal disease in later years in the female and early termination of the pregnancy. In the present study, about 400 women have been studied to attempt to determine some of the host factors which may play a role in the development of bacilluria during pregnancy and perhaps the consequences of such bacilluria in terms of premature termination of the gestation.

JOHN H. HETT, Ph.D.

Pelham Manor, New York

JOHN H. HETT, Ph.D. of Pelham Manor, New York, will speak to the Urology, EENT and Public Health Joint Section Meeting on Monday, May 4 at 11:25 A.M. His topic will be "Fiber Optic Medical Instruments." Dr. Hett will be assisted by Mr. Arnold Kleine, of Hollywood, Florida. Dr. Hett received his M.A. and Ph.D. degrees from Columbia University and was one time Associate Professor of Physics at Manhattan College and a Research Associate at New York University.

He has been a designer of medical instruments for the American gystoscope Makers, Inc. for 20 years, and is the author of the chapter, "Medical Optical Instruments," in *Applied Optical Engineering*. He holds a number of patents in the field of medical instrumentation, including three in the field of fiber optic instrumentation.

An abstract of Dr. Hett's paper follows:

The principles of fiber optic light transmission will be briefly discussed. The structure of the fiber gastroscope and esophagoscope will be discussed as well as experiments with a ureterscope.

The importance of high light transmission of fibers is considered with applications to cystoscope sheaths, pharyngoscopes, urethroscopes and other instruments. A motion picture of endoscopic phenomena taken with a right-angle fiber telescope and a urethroscope will be shown.

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA

Name	*Address*	*Classification*	*County Society*
Barton, James Howard	Social Circle, Georgia	Active	Walton
Cason, Cecil D.	408 Zachry Street Waycross, Georgia	Active	Ware
Duralde, Fernando U.	South Professional Plaza East Point, Georgia	Active	Fulton
Flowers, Thomas Edward	208 Hospital Circle Rome, Georgia	Active	Floyd
Franklin, Ben T.	Box 326 Metter, Georgia	Active	Bulloch-Cand.-Eva.
Hampton, Ray	905 Dilworth Street St. Marys, Georgia	Active	Camden-Charlton
Holley Jacob H.	Donaldsonville, Georgia	Active	Decatur-Seminole
Malone, Randolph A., III	413 Gordon Avenue Thomasville, Georgia	Active	Thomas-Brooks
McCrary, George Alfred	107 Broad Street LaGrange, Georgia	Active	Troup
McLean, Frederick L.	312 Westberry Street Sylvester, Georgia	Active	Worth
Vannix, George L.	771 Virginia Avenue Hapeville, Georgia	Active	Fulton

The Program

SATURDAY, MAY 2

Social Events

(Not a part of Official Program)

Saturday Night, May 2

NOTE: Make reservations in advance with Chairman if possible.

7:00 Georgia Society of Dermatologists Dinner
Pinebrook Inn
Richard B. Ewing, Macon, Chairman

7:30 Georgia Society of Anesthesiologists Social Hour
Macon Elks Club, Mulberry Street
Earl S. Avant, Macon, Chairman

SUNDAY, MAY 3

Social Events

(Not a part of Official Program)

Sunday Morning, May 3

NOTE: Make reservations in advance with Chairman if possible.

9:00 Georgia Society of Dermatologists Business Meeting
Macon Hospital
Richard B. Ewing, Macon, Chairman

11:30 Georgia Pediatric Society Luncheon and Business Meeting
Elks Club, Mulberry Street
John P. Jones, Macon, Chairman

12:00 Georgia Society of Dermatologists Luncheon
Dr. R. M. Reifler's residence, 661 Wimbish Road
Richard B. Ewing, Macon, Chairman

SUNDAY AFTERNOON, MAY 3

2:00 MAG General Business Session

Auditorium, Main Meeting Room

(ALL MAG AND AUXILIARY MEMBERS AND GUESTS INVITED)

PRESIDING

George R. Dillinger, President

NOMINATION OF OFFICERS AND COUNCILORS
(Announcement of Tellers Committee)
President-Elect
Second Vice President
First District Councilor (To serve until 1967)
First District Vice Councilor (To serve until 1967)
Second District Councilor (To serve until 1967)
Second District Vice Councilor (To serve until 1967)
Third District Councilor (To serve until 1967)
Third District Vice Councilor (To serve until 1967)
Fourth District Councilor (To serve until 1967)
Fourth District Vice Councilor (To serve until 1967)
Georgia Medical Society Councilor (To serve until 1967)
Georgia Medical Society Vice Councilor (To serve until 1967)
NOMINATIONS FOR AWARDS:
GENERAL PRACTITIONER OF THE YEAR AWARD
(To be voted on by the House of Delegates)
HARDMAN AWARD

MAG MEMORIAL SERVICE

3:00 Pediatrics, Psychiatry, Dermatology and Public Health Joint Section Meeting

(ALL PHYSICIANS INVITED)

Auditorium, Main Meeting Room

PRESIDING
Richard B. Ewing, Macon

3:00 PICKERS, PLUCKERS AND PRETENDERS: A PANORAMA OF CUTANEOUS SELF-MUTILATION
Morris Waisman, Tampa, Florida

PRESIDING
Robert J. Walker, Jr., Macon

3:30 TUBERCULOSIS IN THE FAMILY SETTING
Paul A. Pamplona, Atlanta

PRESIDING
John P. Jones, Macon

4:00 WELL BABY CARE: UNTAPPED PORTAL OF ENTRY TO FAMILY CARE
Caroline Chandler, Bethesda, Maryland

PRESIDING
Richard B. Ewing, Macon

4:30 SOME CURRENT NEWS AND VIEWS IN PEDIATRIC DERMATOLOGY
C. Conrad Smith, Augusta

PRESIDING
Thomas M. Hall, Macon

4:45 NORMAL PROBLEMS IN ADAPTING TO ADOPTIONS
Martha L. McCranie, Augusta

3:00 Radiology, Chest and Orthopedics Joint Section Meeting

(ALL PHYSICIANS INVITED)

Kilowatt Room, Georgia Power Building

PRESIDING
Sam E. Patton, Macon

3:00 COMPLICATIONS OF ENDOSCOPY
John B. Blalock, New Orleans, Louisiana

3:30 INJURIES ABOUT THE ANKLE
Chestley L. Yelton, Birmingham, Alabama

4:00 UNUSUAL MANIFESTATIONS OF WELL KNOWN CHEST DISEASES
Jerome F. Wiot, Cincinnati, Ohio

4:45 BACKS AND BREATHING
Frank P. Anderson, Augusta

Social Events

(Not a part of Official Program)

Sunday Evening, May 3

NOTE: Make reservations in advance with Chairman if possible.

6:30 Georgia Orthopedic Society Dinner and Business Meeting
Town Pavilion Motel
L. Clyde Sheehan, Jr., Macon, Chairman

7:30 Georgia Chapter American Association Public Health Physicians Dinner and Business Meeting
To Be Announced
Robert J. Walker, Jr., Macon, Chairman

MONDAY MORNING, MAY 4

8:45 MAG Delegates Registration

Auditorium, Main Meeting Room Entrance

9:00 House of Delegates Meeting

Auditorium, Main Meeting Room

PRESIDING
J. Frank Walker, Atlanta, Speaker of the House

9:05 REPORT OF BUSINESS (See Delegates Handbook)
REPORT OF PRESIDENT, WOMAN'S AUXILIARY TO MAG
Mrs. John E. Porter, Savannah

10:00 Diabetes, Medicine, Heart, Pathology and Surgery Joint Section Meeting

(ALL PHYSICIANS INVITED)

Auditorium, Main Meeting Room

PRESIDING
Leonard H. Campbell, Macon

10:00 IRON LOADING ANEMIA
H. Chan White, Jr., Macon

10:15 THE DIFFERENTIAL DIAGNOSIS OF LEFT VENTRICULAR—RIGHT ATRIAL SHUNTS
Hurley D. Jones and Robert H. Franch, Atlanta

10:30 THE GEOGRAPHY OF DISEASE
William Boyd, Toronto, Canada

11:00 PATHOPHYSIOLOGY AND TREATMENT OF HIATAL HERNIA AND ESOPHAGITIS
Edward R. Woodward, Gainesville, Florida

11:30 NEW THOUGHTS ABOUT AN OLD DISEASE, DIABETES MELLITUS
Leo P. Krall, Boston, Massachusetts

10:00 Anesthesiology and Obstetrics and Gynecology Joint Section Meeting

(ALL PHYSICIANS INVITED)

Kilowatt Room, Georgia Power Building

PRESIDING
Gordon W. Jackson, Macon

10:00 WHEN DOES PREGNANCY TEST BECOME NEGATIVE AFTER NORMAL DELIVERY, INCOMPLETE ABORTION AND MISSED ABORTION?
Frank Mullins, Augusta

10:15 THE EFFECT OF PROMETHAZINE OR HYDROXYZINE WITH MEPERIDINE ON LABOR AND DELIVERY
Hoyt Dees, Macon

10:30 THE PLACENTAL TRANSFER OF DRUGS
Frank Moya, Miami, Florida

11:00 THE USES AND ABUSES OF FETAL HEART DETERMINATIONS IN LABOR
E. J. Quilligan, Cleveland, Ohio

11:30 PANEL ON OBSTETRICAL ANESTHESIA

MODERATOR
Gordon W. Jackson, Macon

PANEL
Frederick P. Zuspan, Augusta
John E. Steinhaus, Atlanta
Frank Moya, Miami, Florida
E. J. Quilligan, Cleveland, Ohio

10:00 Urology, EENT and Public Health Joint Section Meeting

(ALL PHYSICIANS INVITED)

Auditorium, Civic Room

PRESIDING
W. D. Jarratt, Macon

10:00 A SURGICAL TREATMENT FOR NYSTAGMUS
Robert E. L. Shumate, Columbus

10:20 THE SURGICAL TREATMENT OF VERTIGO
Claude Lee Pennington, Macon

10:40 VIEW EXHIBITS

PRESIDING
Robert J. Walker, Jr., Macon

11:00 THE TYRANNY OF EFFECTIVE TREATMENT
David Sencer, Atlanta

PRESIDING
Robert W. McAllister, Macon

11:25 FIBER OPTIC MEDICAL INSTRUMENTS
John H. Hett, Ph.D., Pelham Manor, New York, and Mr. Arnold Kleine, Hollywood, Florida

MONDAY AFTERNOON, MAY 4

12:00 MAG General Business Session

(ALL MAG AND AUXILIARY MEMBERS AND GUESTS INVITED)

Auditorium, Main Meeting Room

PRESIDING
George R. Dillinger, Thomasville, President, Medical Association of Georgia

12:00 INVOCATION
Reverend James R. Webb, Vineville Methodist Church, Macon

12:05 WELCOME
Braswell E. Collins, Macon, President, Bibb County Medical Society

WELCOME
Honorable B. F. Merritt, Mayor, City of Macon

PRESIDING
Walker L. Curtis, College Park, First Vice President

REPORT OF THE PRESIDENTIAL YEAR 1963-64
George R. Dillinger, Thomasville, President

OUR ASSOCIATION FUTURE FOR 1964-1965
J. G. McDaniel, Atlanta, President-Elect

Social Events

(Not a part of Official Program)

Monday Afternoon, May 4

NOTE: Make reservations in advance with Chairman if possible.

11:00 Georgia Radiological Society Meeting and Luncheon
Stallworth's Restaurant, Lanier Hotel
Robert F. Cato, Macon, Chairman

3:00 Georgia Radiological Society Film Reading Session
Kilowatt Room, Georgia Power Company Building
Robert F. Cato, Macon, Chairman

12:30 Georgia Thoracic Society and Georgia Chapter American College of Chest Physicians Luncheon, Meeting and Program
S & S Cafeteria, Walnut Street
Sam E. Patton, Macon, Chairman

1:00 Georgia Urological Association, Georgia Society of Ophthalmology and Otolarygology and Georgia Chapter American Association of Public Health Physicians Luncheon
To Be Posted at Registration Desk
W. D. Jarratt, Macon, Chairman

1:00 Georgia Association of Pathologists Luncheon and Meeting
Empire Room, Dempsey Hotel
Leonard H. Campbell, Macon, Chairman

1:30 Georgia Chapter American College of Surgeons Luncheon and Meeting
Dempsey Hotel
J. P. Woodhall, Macon, Chairman

2:30 Georgia Orthopedic Society Meeting
Dunwoody Room, YMCA
L. Clyde Sheehan, Jr., Macon, Chairman

4:00 Georgia Society of Internal Medicine Meeting
Hotel Lanier
Henry H. Tift, Macon, Chairman

2:30 MAG Reference Committees

2:30 Reference Committees No. 1, No. 2, No. 3, No. 4 and No. 5
Auditorium, Main Meeting Room

MONDAY EVENING, MAY 4

Social Events

(Not a part of Official Program)

Monday Evening, May 4

NOTE: Make reservations in advance with Chairman if possible.

6:30 Medical College of Georgia Alumni Social Hour and Dinner
Walter Little Room, Dempsey Hotel
Jule C. Neal, Macon, Chairman
Emory University Medical Alumni Association Social Hour and Dinner
To Be Announced
Edmund A. Brannen, Macon, Chairman

6:30 Georgia Society of Internal Medicine Social Hour and Dinner
Hotel Lanier
Henry H. Tift, Macon, Chairman

TUESDAY MORNING, MAY 5

9:00 G.P. Day—General Session

(ALL PHYSICIANS INVITED)
Auditorium, Main Meeting Room

MONDAY AFTERNOON, MAY 4

Joint Session: Georgia Thoracic Society and Georgia Chapter, American College of Chest Physicians

S & S Cafeteria, 434 Walnut Street, 12:30 p.m. - 4:45 p.m.

Presiding: Joe Sam Robinson, M.D., Macon, Georgia

12:30 p.m. Dutch Luncheon (Lower Level)

1:30 p.m. Business Session, Georgia Chapter, American College of Chest Physicians—Robert H. Vaughan, M.D., presiding

2:00 p.m. John Blalock, M.D., Ochsner Clinic, New Orleans, Louisiana
"Pneumoperitoneum as an Adjunct to Lobectomy"

2:45 p.m. B. Shannon Gallaher, M.D., Assistant Clinical Professor, Department of Medicine, Medical College of Georgia, Augusta, Georgia
"The Etiological Role of Chronic Bronchitis in Obstructive Pulmonary Emphysema"

3:15 p.m. Ross L. McLean, M.D., Associate Professor in Medicine, Emory University School of Medicine, Atlanta, Georgia
"Tuberculosis — Problems Still Unsolved"

3:45 p.m. Lester Rumble, Jr., M.D., Director of Medical Education, St. Joseph's Infirmary, and Director, Albert Steiner Memorial Clinic, Atlanta, Georgia
"The Use of Nebulized Steroids"

4:15 p.m. Lamar B. Peacock, M.D., Atlanta, Georgia
"Allergy and Its Effect on the Respiratory Tract"

PRESIDING
Charles E. Bohler, Brooklet

9:00 TRANSIENT CEREBRAL ISCHEMIC ATTACKS, THEIR CLINICAL SIGNIFICANCE AND DIFFERENTIAL DIAGNOSIS
Herbert R. Karp, Atlanta

9:30 STATE OF THE HEALTH OF THE STATE OF GEORGIA
John H. Venable, Atlanta

9:50 PROBLEMS IN TREATMENT OF ATHLETIC INJURIES
Fred L. Allman, Jr., Atlanta

10:10 STENOSIS OF URETHRAL MEATUS
William H. Bennett, Atlanta

10:25 THE DEVELOPMENT OF CELLULAR PATHOLOGY
William Boyd, Toronto, Canada

11:30 GaMPAC Hour of Decision

(ALL MAG AND AUXILIARY MEMBERS AND GUESTS INVITED)

Auditorium, Main Meeting Room

(Speaker to be announced)

TUESDAY AFTERNOON, MAY 5

Social Events

(Not a part of Official Program)

Tuesday Afternoon, May 5

NOTE: Make reservations in advance with Chairman if possible.

12:30 Georgia Diabetes Association Luncheon and Meeting
Stallworth's Restaurant, Lanier Hotel
H. C. Atkinson, Chairman, Macon

1:00 Georgia State OB and GYN Society and Georgia Academy of General Practice Luncheon; and Meeting of OB and GYN Society
Empire Room, Dempsey Hotel
Gordon W. Jackson, Macon, Chairman
Charles E. Bohler, Brooklet, Chairman

1:00 Tumor Clinic Directors Luncheon Meeting
Elks Club
J. Benham Stewart, Director, Macon Tumor Clinic, Chairman

2:30 Medicine, Heart and Pathology Joint Section Meeting

(ALL PHYSICIANS INVITED)

Auditorium, Main Meeting Room

PRESIDING
Henry H. Tift, Macon

2:30 LIVER BIOPSY AS A LIVER FUNCTION TEST
David E. Hein, Atlanta

2:50 PRACTICAL AUTOPSY EXAMINATION PROCEDURES
D. Frank Mullins and W. B. Mullins, Augusta

3:10 THE MANAGEMENT OF VENTRICULAR FIBRILLATION
W. D. Stribling, III, Gainesville

3:30 ISCHEMIA MODIFYING FACTORS INFLUENCING THE NATURAL HISTORY OF OCCLUSIVE CEREBRAO-VASCULAR DISEASE
Herbert R. Karp, Atlanta

4:00 THE HYPERVENTILATION SYNDROME
Hugh K. Sealy, Macon

4:20 REHABILITATION NEED NOT BE HIGHBROW
Zeb L. Burrell, Jr., Milledgeville

4:40 AN EVALUATION OF THE RADIOACTIVE TRI-ODOTHYRONINE UPTAKE TEST
L. A. Erbele and J. B. Hurst, Macon

2:30 Diabetes, Surgery and Obstetrics and Gynecology Joint Section Meeting

(ALL PHYSICIANS INVITED)

Kilowatt Room, Georgia Power Building

PRESIDING
J. P. Woodhall, Macon

2:30 BALANCED OPERATION FOR ACHALASIA
Milford B. Hatcher, T. H. Williams and Morris Brown, Macon

2:40 CURRENT TRENDS OF THE TREATMENT OF THE MENOPAUSAL PATIENT
Gordon W. Jackson, Macon

2:50 THE SIGNIFICANCE OF BACTERIA IN THE URINARY TRACT DURING PREGNANCY
E. J. Quilligan, Cleveland, Ohio

3:20 BENIGN DISEASES OF THE BREAST
Robert L. Brown, Atlanta

3:50 VIEW EXHIBITS

4:00 SOLVED AND UNSOLVED PROBLEMS OF DIABETES MANAGEMENT
Leo P. Krall, Boston, Massachusetts

4:30 A GOLDEN OPPORTUNITY
Arthur A. Smith, Atlanta

4:40 GASTRIC FREEZING IN THE TREATMENT OF DUODENAL ULCER
Herman Delancy and L. E. Danzig, Savannah

4:50 SPONTANEOUS RETURN OF FUNCTION OF FACIAL MUSCLES FOLLOWING RADICAL EXCISION OF PAROTID CARCINOMA
William E. Schatten, William G. Hamm and Joseph H. Patterson, Atlanta

WEDNESDAY MORNING, MAY 6

9:00 House of Delegates Second Meeting

Auditorium, Main Meeting Room

PRESIDING
J. Frank Walker, Atlanta, Speaker of the House

ORDER OF BUSINESS
(See Delegates Handbook)

10:30 MAG General Business Session

(ALL MAG AND AUXILIARY MEMBERS AND GUESTS INVITED)

Auditorium, Main Meeting Room

PRESIDING
George R. Dillinger, Thomasville, President

PRESENTATION OF 50-YEAR CERTIFICATES
Thomas W. Goodwin, Augusta, Immediate Past President, Medical Association of Georgia

Presentation of Scientific Exhibit Awards
Edgar Grady, Atlanta, Chairman, Scientific Awards Committee
Presentation of General Practitioner of the Year Award
Albert L. Morris, Fairburn, President, Georgia Academy of General Practice
Presentation of MAG Certificates of Appreciation
John T. Mauldin, Atlanta, Secretary, Medical Association of Georgia
Presentation of Hardman Award
J. G. McDaniel, Atlanta, President-Elect, Medical Association of Georgia
Presentation of MAG Distinguished Service Award
George R. Dillinger, Thomasville, President, Medical Association of Georgia
Section of Site for Annual Meeting 1966
Announcement of MAG Election Results
Chairman, Tellers Committeee
Installation of 1964-1965 Officers
George R. Dillinger, Thomasville, Immediate Past President, Medical Association of Georgia
Adjournment of 110th Annual Session

VOTING RULES

By!aws, Chapter V, Election of Officers

BYLAWS, CHAPTER V, ELECTION OF OFFICERS

Section 3, Method. The President shall appoint a committee of not less than three Tellers immediately after the close of nominations, who shall have charge of the election. The Secretary shall have prepared in advance an official ballot and an official ballot box, which shall be kept in the custody of the Tellers Committee. One ballot only shall be given to each active voting member when he presents himself to cast his ballot. Each member and no other shall prepare his ballot and shall deposit it at that time in the locked ballot box.

The candidates for office receiving a majority of the votes shall be declared elected, but if no majority is received on the first ballot, the members present shall select by secret ballot the officer from the two candidates having the highest number of votes.

Section 4. Time. Voting shall take place during the hours of the scientific program up to the beginning of the last day of the Annual Session. At that time the Committee of Tellers shall count the ballots and report their findings to the members.

1964 CALENDAR OF MEETINGS

State

March 18-20—"Three Days of Advanced Electrocardiography and Vectorcardiography." Postgraduate course sponsored by the Department of Medicine, Emory University School of Medicine, Atlanta.

March 19-21—Annual Meeting of the Georgia Society of Ophthalmology and Otolaryngology, Callaway Gardens, Pine Mountain, Ga.

April 15—Medical Seminar sponsored by the Georgia Academy of General Practice and the Ninth District Medical Society, Elks' Club, Gainesville.

May 3-6—110th Annual Session of the Medical Association of Georgia, Macon, Ga.

May 15-16—Georgia Heart Association Annual Meeting, Americana Motor Hotel, Atlanta.

Regional

March 14-21—Medical Students Aid Society, Diplomat Hotel, Hallandale, Fla.

March 16-19—American College of Surgeons (sectional meeting for surgeons and graduate nurses), Roosevelt and Jung Hotels, New Orleans, La.

March 21-28—Southeastern Surgical Congress, held aboard the S.S. Hanseatic. Cruise will begin March 21, sailing from Ft. Lauderdale, Fla. and returning to the same port on March 28. Stops to include St. Thomas, San Juan and Nassau.

April 1-3—"Three Days in Cardiology," sponsored by the American Heart Association on Clinical Cardiology, Duke University, Durham, N. C.

April 1-3—American Surgical Association, The Homestead, Hot Springs, Va.

April 6-10—Forty-fifth Annual Session of the American College of Physicians, Convention Hall, Atlantic City, N. J.

April 9-11—Symposium on "Pediatrics—The Sick Child in General Practice," Mound Park Hospital Foundation, Inc., St. Petersburg, Fla.

April 13-15—Association of Surgeons of Southern Railway System, Jack Tar Durham Hotel, Durham, N. C.

April 13-16—American Radium Society, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 15-18—West Virginia Academy of Ophthalmology and Otolaryngology, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 23-25—American Gastroenterological Association, Sheraton Hotel, Dallas, Texas.

April 27-28—Society of Head and Neck Surgeons, Peabody Hotel, Memphis, Tenn.

April 30-May 2—American Association for History of Medicine, Sheraton-Park Hotel, Washington, D. C.

May 17-22—American College of Obstetrics and Gynecologists, Americana Hotel, Bal Harbour, Fla.

May 21-23—Eighth Biennial Cardiovascular Seminar, sponsored by the Heart Association of Greater Miami, Carillton Hotel, Miami Beach, Fla.

May 25-27—American Gynecological Society, The Homestead, Hot Springs, Va.

May 28-30—American Ophthalmological Society, The Homestead. Hot Springs, Va.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La. Jolla, Calif.

March 16-28—Postgraduate Course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine.

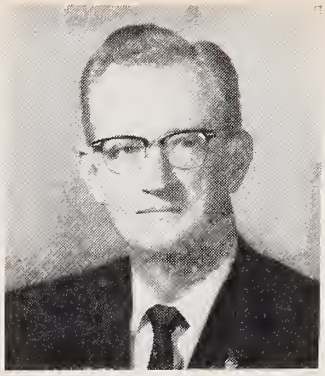
March 25-27—"Management of Trauma," Humphreys Postgraduate Center, University of Colorado School of Medicine, Denver, Colo.

April 11-16—American Academy of General Practice, Convention Hall, Atlantic City, N. J.

April 29-May 3—Student American Medical Association, Sherman House, Chicago, Ill.

June 21-25—American Medical Association Annual Meeting, San Francisco, Calif.

GEORGE R. DILLINGER
President



WALKER L. CURTIS
First Vice-President

J. K. TRAIN
Second Vice-President

MEDICAL ASSOCIATION OF GEORGIA OFFICERS

1963-1964

JOHN T. MAULDIN
Secretary

J. G. McDANIEL
President-Elect

Medical Association of Georgia Officers, Committees, and Boar

Officers

President—George R. Dillinger, Thomasville (1964)*
President-Elect—J. G. McDaniel, Atlanta (1964)*
Immediate Past President—Thomas W. Goodwin, Augusta (1964)*
First Vice President—Walker L. Curtis, College Park (1964)*
Second Vice President—John Kirk Train, Savannah (1964)*
Chairman of Council—A. W. Simpson, Jr., Washington (1964)*
Secretary—John T. Mauldin, Atlanta (1966)*
Treasurer—John S. Atwater, Atlanta (1964)*
Speaker of the House—J. Frank Walker, Atlanta (1965)
Vice Speaker of the House—Joseph B. Mercer, Brunswick (1965)

*Executive Committee

Honorary Advisory Board

Past Presidents	*Term*
J. W. Palmer, Ailey	1918-1919
C. H. Richardson, Macon	1933-1934
Clarence L. Ayers, Toccoa	1934-1935
Grady N. Coker, Canton	1938-1939
Allen H. Bunce, Atanta	1941-1942
James A. Redfearn, Albany	1942-1943
W. A. Selman, Atlanta	1943-1944
A. M. Phillips, Macon	1950-1951
William P. Harbin, Jr., Rome	1953-1954
H. D. Allen, Jr., Milledgeville	1955-1956
W. Bruce Schaefer, Toccoa	1957-1958
Luther H. Wolff, Columbus	1959-1960
Milford B. Hatcher, Macon	1960-1961
Fred H. Simonton, Chickamauga	1961-1962
Thomas W. Goodwin, Augusta	1962-1963

Councilors

District

1—Charles E. Bohler, Brooklet (1964)
2—W. Frank McKemie, Albany (1964)
3—Frank A. Wilson, Leslie (1964)
4—Virgil B. Williams, Griffin (1964)*
5—Floyd Sanders, Decatur (1965)
6—William Rawlings, Sandersville (1965)
7—Ralph N. Johnson, Rome (1965)
8—F. G. Eldridge, Valdosta (1965)
9—C. R. Andrews, Canton (1966)
10—A. W. Simpson, Jr., Washington (1966)

Georgia Medical Society
Walter Brown, Savannah (1964)
Richmond County Medical Society
H. D. Pinson, Augusta (1966)
Muscogee County Medical Society
Luther H. Wolff, Columbus (1965)
Bibb County Medical Society
George H. Alexander, Forsyth (1966)
Fulton County Medical Society
Charles S. Jones, Atlanta (1966)

Vice Councilors

District

1—William Simmons, Sylvania (1964)
2—J. C. Brim, Pelham (1964)
3—Robert Martin, Cuthbert (1964)
4—C. T. Cowart, LaGrange (1964)
5—Lawrence Matthews, Atlanta (1965)
6—John Bell, Dublin (1965)
7—W. C. Mitchell, Smyrna (1965)
8—J. W. Yeomans, Jesup (1965)
9—P. T. Scoggins, Commerce (1966)
10—M. A. Hubert, Athens (1966)

Georgia Medical Society
T. A. Peterson, Savannah (1964)
Richmound County Medical Society
J. L. Mulherin, Augusta (1966)
Muscogee County Medical Society
Roy L. Gibson, Columbus (1965)
Bibb County Medical Society
W. H. M. Weaver, Macon (1966)
Fulton County Medical Society
Linton H. Bishop, Atlanta (1966)

Delegates to AMA

Delegate—J. W. Chambers, LaGrange (1966)
Delegate—Eustace A. Allen, Atlanta (1965)
Delegate—Henry H. Tift, Macon (1965)
Alternate—George R. Dillinger, Thomasville (1966)
Alternate—J. Frank Walker, Atlanta (1965)
Alternate—P. D. Ellington, Augusta (1965)

ASSOCIATION COMMITTEES

EXECUTIVE COMMITTEE

George R. Dillinger, Thomasville, President (1964)
J. G. McDaniel, Atlanta, President-Elect (1964)
Thomas W. Goodwin, Augusta, Immediate Past President (1964)
Walker L. Curtis, College Park, First Vice President (1964)
A. W. Simpson, Jr., Washington, Chairman of Council (1964)
John T. Mauldin, Atlanta, Secretary (1966)
Virgil B. Williams, Griffin, Chairman of Finance (1964)
John S. Atwater, Atlanta, Treasurer, Ex-officio (1964)

FINANCE COMMITTEE

Virgil B. Williams, Griffin, Chairman
Charles R. Andrews, Canton
Charles E. Bohler, Brooklet
John S. Atwater, Atlanta, Ex-officio

PROFESSIONAL CONDUCT COMMITTEE

W. Bruce Schaefer, Toccoa, Chairman
Luther H. Wolff, Columbus
Milford B. Hatcher, Macon
Fred H. Simonton, Chickamauga
Thomas W. Goodwin, Augusta

WOMAN'S AUXILIARY ADVISORY COMMITTEE

Ralph W. Fowler, Marietta, Chairman
Remer Y. Clark, Marietta
E. W. Waldemayer, Americus
John E. Porter, Savannah
T. A. Peterson, Savannah
Virgil B. Williams, Griffin, Ex-officio
J. G. McDaniel, Atlanta, Ex-officio

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Braswell Collins, Macon, Vice Chairman (1966)
Thomas W. Goodwin, Augusta (1964)
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Robert E. Huie, Decatur (1966)

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Alex Jones, Griffin (1965)
George H. Alexander, Forsyth (1966)

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Eugene L. Griffin, Atlanta (1965)
Virgil B. Williams, Griffin (1965)
F. J. Funk, Atlanta (1965)
R. W. Edenfield, Macon (1966)
Ernest B. Dunlap, Atlanta (1964)
John Bowen, Sandy Springs (1966)
A. E. Hauck, Atlanta (1966)

Subcommittee on Crippled Children

Ernest B. Dunlap, Jr., Atlanta, Chairman
J. C. Hughston, Columbus
F. J. Funk, Jr., Atlanta
John L. Chandler, Jr., Augusta
H. M. Coe, Brunswick
Robert Mabon, Atlanta
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W. G. Elliott, Cuthbert
Ruth M. Waring, Savannah
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Subcommittee on Disaster Medical Care

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Paul T. Erickson, Atlanta, Ex-officio
O. F. Whitman, Atlanta, Ex-officio
Charles B. Brown, Atlanta, Ex-officio

Subcommittee on Maternal and Infant Welfa

Eugene L. Griffin, Atlanta, Chairman
Morris Brackett, Atlanta, Secretary
H. J. Bickerstaff, Columbus
Peter Hydrick, College Park
J. W. Smith, Manchester
A. G. LeRoy, Thomson
C. I. Bryans, Augusta
Luella M. Klein, Atlanta
F. P. Zuspan, Augusta, Ex-officio
John D. Thompson, Decatur, Ex-officio

Subcommittee on Medical Indigency

A. E. Hauck, Atlanta, Chairman
M. C. Adair, Washington, Vice Chairman
Marvin Silverstein, Atlanta
Charles R. Smith, Columbus
James R. Winburn, Jr., Savannah
S. K. Brown, Augusta
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Subcommittee on Public Health

R. W. Edenfield, Macon, Chairman
Alex G. Little, Valdosta
Lee H. Battle, Jr., Rome
J. Miller Byne, Waynesboro
Virgil B. Williams, Griffin
Samuel U. Braly, Dallas

Subcommittee on Rehabilitation

F. James Funk, Atlanta, Chairman
John B. O'Neal, Elberton
Vernon E. Powell, Atlanta
W. Upton Clary, Savannah
Mercer Blanchard, Columbus
Edgar O. Rand, Atlanta

Subcommittee on School Child Health

John Bowen, Sandy Springs, Chairman
J. C. Hughston, Columbus
William H. Bonner, Athens
Virginia McNamara, Atlanta
M. D. Pittard, Toccoa

Subcommittee on Veterans Affairs

W. Bruce Schafer, Toccoa, Chairman
Lee Howard, Jr., Savannah
F. P. Holder, Eastman

BOARD OF HOSPITAL ACTIVITIES

Milford B. Hatcher, Macon, Chairman (1965
Walter E. Brown, Savannah, Vice Chairma (1964)
Rafe Banks, Jr., Gainesville (1966)
Jack C. Norris, Atlanta (1965)
Ralph N. Johnson, Rome (1964)

Subcommittee on Blood Banks

Jack C. Norris, Atlanta, Chairman
H. V. Bell, Atlanta
Walter Shepeard, Augusta
Menard Ihnen, Augusta
S. C. Rutland, Atlanta
J. W. Iseman, Atlanta, Ex-officio

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W. L. Pomeroy, Waycross
Rafe Banks, Gainesville
C. W. Mills, Jr., Atlanta
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BOARD OF INSURANCE AND ECONOMIC

David R. Thomas, Jr., Augusta, Chairman (14
W. L. Pomeroy, Waycross, Vice Chairman (14
H. D. Pinson, Augusta (1966)
John T. Mauldin, Atlanta (1966)
William Moore, Atlanta (1965)

Subcommittee on Relative Value Study

Harry D. Pinson, Augusta, Chairman
Robert E. Cato, Macon
Remer Y. Clark, Marietta
Joseph E. Griffith, Marietta
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Subcommittee on Medical Defense

Charles S. Jones, Atlanta, Chairman
John T. Mauldin, Atlanta
Henry M. Finch, Atlanta
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BOARD OF INTERPROFESSIONAL RELATIO

William Coles, Chairman, Atlanta (1965)
Henry Finch, Atlanta, Vice Chairman (1964)
C. Daniel Cabaniss, Atlanta (1964)
M. C. Adair, Washington (1966)
Stephen T. Barnett, Jr., Atlanta (1966)

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amuel U. Braly, Dallas, Chairman (1964)
ohn Bell, Dublin, Vice Chaiman (1964)
. Frank Walker, Atlanta (1964)
ohn M. Martin, Augusta (1966)
red L. Allman, Atlanta (1965)
Maurice Arnold, Hawkinsville (1965)
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William Harbin, Rome (1965)
ohn B. O'Neal, Elberton (1964)

ommittee on National Legislation

. Frank Walker, Atlanta, Chairman
st District—T. A. Peterson, Savannah
nd District—W. Frank McKemie, Albany
rd District—Robert Pendergrass, Americus
th District—J. W. Chambers, LaGrange
th District—Thomas Florence, Atlanta
th District—John Bell, Dublin
th District—Fred H. Simonton, Chickamauga
th District—Horace Joiner, Douglas
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th District—R. H. Randolph, Athens

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ohn Bell, Dublin, Chairman
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V. R. Birdsong, Macon
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. W. Simpson, Jr., Washington
ack Austin, Griffin
urner W. Rentz, Colquitt

ARD OF MEDICAL EDUCATION

homas W. Goodwin, Augusta, Chairman (1966)
. A. Sappington, Thomaston, Vice Chairman (1964)
. W. Chambers, LaGrange (1964)
orbett Thigpen, Augusta (1966)
Walter Bloom, Marietta (1965)
raswell Collins, Macon (1965)
en K. Looper, Canton (1965)
. R. Jennings, Brunswick (1966)

ommittee on AMA-ERF

raswell Collins, Macon, Chairman
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. B. Elliott, Cedartown
dgar Boling, Atlanta
Mrs. W. P. Stoner, Sylvester (Auxiliary)

ommittee on Clarkesville Lab.

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amil Murray, Gainesville
ee Howard, Jr., Savannah

ommittee on Medical Education

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. Willis Hurst, Atlanta
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A. P. Richardson, Atlanta, Ex-officio
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Subcommittee on Medical School Course

T. A. Sappington, Thomaston, Chairman
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Harry Harper, Augusta
Wood Lovell, Atlanta
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BOARD OF OCCUPATIONAL HEALTH

T. A. Peterson, Savannah, Chairman (1964)
C. L. Ridley, Jr., Macon, Vice Chairman (1964)
C. R. Andrews, Canton (1966)
Thomas N. Lumsden, Clarkesville (1966)
Joseph E. Griffith, Marietta (1966)

Subcommittee on Industrial Health

C. L. Ridley, Jr., Macon, Chairman
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A. M. Collinsworth, Atlanta

Subcommittee on Rural Health

Thomas N. Lumsden, Clarkesville, Chairman
Carl S. Pittman, Jr., Tifton
J. S. Garner, Rome
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Linton H. Bishop, Atlanta, Chairman (1964)
Floyd Sanders, Decatur, Vice Chairman (1964)
M. A. Hubert, Athens (1965)
J. Rhodes Haverty, Atlanta (1966)
Walter Bramblett, Forsyth (1965)
E. J. Waits, Atlanta (1966)
Harrison Reeves, Atlanta (1966)

Subcommittee on Public Service

Floyd B. Sanders, Decatur
William C. Coles, Atlanta
Thomas N. Lumsden, Clarkesville
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Subcommittee on Public Service Information Clearing House

W. D. Stribling, Gainesville
John Yauger, Atlanta
Fincher Powell, Decatur

Subcommittee on Medicine and Religion

Harrison Reeves, Atlanta, Chairman
Frank P. Anderson, Jr., Augusta
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C. D. Cabaniss, Atlanta
Curtis G. Hames, Claxton
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Sidney Isenberg, Atlanta
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F. James Funk, Jr., Atlanta
A. Bird Daniel, Statesboro
Harry H. McGee, Jr., Savannah
Maurice F. Arnold, Hawkinsville
C. Markham Berry, Ellijay
Thomas Sellers, Atlanta

Subcommittee on Weekly Health Column

J. Rhodes Haverty, Atlanta, Chairman
Golden Hinton, Athens
John T. Godwin, Atlanta
Thomas Montgomery, Athens
Jay R. Johnson, Gainesville
Samuel O. Poole, Gainesville
Nathan Gershon, Atlanta
C. B. Fulghum, Jr., Atlanta
A. C. Johnson, Jr., Gainesville
Nicholas E. Davies, Atlanta
Joseph L. Girardeau, Atlanta
Jack Birge, Carrollton
Frederick F. Hardin, Atlanta
Stuart Fitzhugh, Griffin
Charles M. Silverstein, Atlanta
F. J. Funk, Atlanta
A. I. Miller, Smyrna
Charles E. Dowman, Atlanta
Robert C. Shuman, Marietta
Harrison L. Rogers, Atlanta
Joseph E. Griffith, Marietta
W. L. McDougall, Atlanta
James E. Anthony, Decatur

BOARD OF SPECIAL ACTIVITIES

John S. Atwater, Atlanta, Chairman (1964)
Frank A. Wilson, Jr., Leslie, Vice Chairman (1964)
C. T. Cowart, LaGrange (1965)
Leo Smith, Waycross (1966)
Hoke Wammock, LaGrange (1966)
C. L. Edwards, Dalton (1965)

BOARD OF VOLUNTEER HEALTH AGENCIES

R. C. Pendergrass, Americus, Chairman (1964)
P. T. Scoggins, Commerce, Vice Chairman (1964
James N. Brawner, Atlanta (1966)
F. G. Eldridge, Valdosta (1966)
Thomas L. Ross, Macon (1965)

Subcommittee on Cancer

R. C. Pendergrass, Americus, Chairman
Ralph J. Davis, Rome
John T. Mauldin, Atlanta
Everett L. Bishop, Atlanta
Thomas Harrold, Macon
Hoke Wammock, LaGrange
Robert L. Brown, Atlanta
John T. Godwin, Atlanta
H. H. McGee, Jr., Savannah
Menard Ihnen, Augusta

Subcommittee on Mental Health

1st District—Abraham Center, Savannah
2nd District—E. E. Davis, Thomasville
3rd District—Frank A. Wilson, Leslie
4th District—Herbert D. Tyler, Thomaston
5th District—James N. Brawner, Atlanta, Chairma
6th District—J. R. S. Mays, Macon
7th District—M. V. B. Teem, Marietta
8th District—Leo Smith, Waycross
9th District—W. D. Stribling, Gainesville
10th District—B. F. Moss, Augusta
Addison M. Duval, Atlanta, Ex-officio

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rst District

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Frank Lovett, Memorial Clinic, Statesboro, *Secretary*

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C. E. Finney, 716 N. Monroe, Albany, *Secretary*

hird District

Simone Brocato, Physicians Building, Columbus, *President*
Robert Collins, 142 S. Jackson Street, Americus, *Secretary*

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Morgan Kellum, Thomaston, *Secretary*

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Carl C. Jones, 1293 Peachtree Street, N.E., Atlanta 9, *Secretary*

Sixth District

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W. A. Bootle, Jr., 700 Spring Street, Macon, *Secretary*

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Clarence J. Sapp, 200 E. Third Street, Rome *Secretary*

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Neal F. Yeomans, Waycross, *Secretary*

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Hamil Murray, Gainesville, *Secretary*

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Mr. Linwood Beck, 58 Baltimore Place, N.W., Atlanta 8, *Executive Secretary*

Georgia Pediatric Society

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L. C. Antrobus, 3130 Maple Drive, N.E., Atlanta 5, *Secretary*

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James T. King, 340 Boulevard, N. E., Atlanta 12, *President*

A. Paul Keller, 1010 Prince Avenue, Athens, *Secretary*

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John T. Godwin, 265 Ivy Street, N.E., Atlanta 3, *Secretary*

Georgia Society of Anesthesiologists

Jack B. Williams, University Hospital, Augusta, *President*

Frederick A. Carpenter, 89 Butler Street, S.E., Atlanta 3, *Secretary*

Georgia State OB and GYN Society

C. I. Bryans, Talmadge Hospital, Augusta, *President*

B. A. McCrum, 420 E. Broad Street, Gainesville, *Secretary*

Georgia Orthopedic Society

Walter P. Barnes, 671 Hemlock Street, Macon, *President*

Richard E. King, 340 Boulevard, N.E., Atlanta 12, *Secretary*

Georgia Chapter, American College of Surgeons

John W. McLeod, 223 S. Main Street, Moultrie, *President*

S. A. Roddenbery, 711 Center Street, Columbus, *Secretary*

Georgia Radiological Society

George W. Brown, Griffin, *President*

David Robinson, 9 Medical Arts Center, Savannah, *Secretary*

Georgia Chapter, American College of Chest Physicians

Robert H. Vaughn, Physicians Building, Columbus, *President*

Walter S. Dunbar, 384 Peachtree Street, N.E., Atlanta 8, *Secretary*

Georgia Urological Association

Peter L. Scardino, 2515 Habersham Street, Savannah, *President*

David C. Williams, Jr., 1142 Druid Park Avenue, Augusta, *Secretary*

Georgia Diabetes Association

Harold C. Atkinson, 724 Hemlock Street, Macon, *President*

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J. S. Robinson, 700 Spring Street, Macon *President*

Coleman T. King, Battey State Hospital, Rome, *Secretary*

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Georgia Psychiatric Association

Charles R. Smith, 1953 Seventh Avenue, Columbus, *President*

Luther J. Smith, 1953 Seventh Avenue, Columbus, *Secretary*

Georgia Society of Dermatologists

Richard B. Ewing, 643 Orange Street, Macon, *President*

R. M. Reifler, 729 Pine Street, Macon, *Secretary*

Georgia Academy of General Practi

Albert L. Morris, Fairburn, *President*

Lyle F. Herrmann, P. O. Box 389, Hapevi *Secretary*

Georgia Society of Internal Medici

Edwin C. Evans, 1211 W. Peachtree Str N.E., Atlanta 8, *President*

J. S. Wilson, 490 Peachtree, N.E., Atlanta *Secretary*

American College of Physicians

Sterling Claiborne, 384 Peachtree Street, N.E., Atlanta 8, *President*

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J. F. Hackney, 99 Butler Street, S.E., Atlanta 3, *President*

Howard K. Sessions, Department of Pub Health, Capitol Square, Atlanta 3, *Secret*

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Horace L. Morgan, Baxley, Secretary

2—BALDWIN—1964
George L. Echols, Jr., Milledgeville, President
Harry B. Johnston, Milledgeville, Secretary

4—BARTOW—1964
W. B. Dillard, Jr., Cartersville, President
Virginia D. Hamilton, Cartersville, Secretary

5—BEN HILL-IRWIN—1964
W. C. Sams, Ocilla, President
J. E. Smith, Fitzgerald, Secretary

6—BIBB—1964
Braswell E. Collins, Macon, President
John T. DuPree, Macon, Secretary

7—BLUE RIDGE—1964
William Tryon, Blue Ridge, President
Thomas J. Hicks, McCaysville, Secretary

8—BULLOCH-CANDLER-EVANS—1964
C. E. Bohler, Brooklet, President
Albert M. Deal, Statesboro, Secretary

9—BURKE—1964
J. M. Byne, Jr., Waynesboro, President
Charles G. Green, Waynesboro, Secretary

10—CARROLL-DOUGLAS-HARALSON—1964
H. L. McLendon, Carrollton, President
J. H. Beall, Carrollton, Secretary

11—GEORGIA MEDICAL SOCIETY—1964
A. F. Williams, Savannah, President
J. J. Holloman, Savannah, Secretary

12—CHATTOOGA—1963
Wm. W. Hyden, Trion, President
Homer E. Spivey, Summerville, Secretary

13—CHATTAHOOCHEE—1964
James S. Mashburn, Cumming, President
Cecil L. Miller, Buford, Secretary

14—CHEROKEE-PICKENS—1962
Arthur M. Hendrix, Canton, President
John A. Cauble, Canton, Secretary

15—CRAWFORD W. LONG—1964
A. B. Boyd, Athens, President
George Erwin, Athens, Secretary

16—CLAYTON-FAYETTE—1962
T. J. Busey, Fayetteville, President
Wells Riley, Jonesboro, Secretary

17—COBB—1964
C. T. Henderson, Marietta, President
E. A. Vaughn, Marietta, Secretary

18—COFFEE—1962
Dan A. Jardine, Douglas, President
C. S. Meeks, Jr., Douglas, Secretary

19—COLQUITT—1964
Jason L. Meadors, Moultrie, President
Walter E. Harrison, Moultrie, Secretary

20—COWETA—1964
J. Luke Clements, Newnan, President
Charles B. Thomas, Newnan, Secretary

21—DECATUR-SEMINOLE—1964
E. M. Griffin, Bainbridge, President
M. A. Ehrlrich, Bainbridge, Secretary

22—DEKALB—1964
Howard B. Lee, Decatur, President
M. Hobson Rice, Decatur, Secretary

23—DOUGHERTY—1964
C. E. Bridger, Albany, President
J. D. Bateman, Albany, Secretary

24—CAMDEN-CHARLTON—1964
G. W. Barker, St. Marys, President
H. H. Robinson, Kingsland, Secretary

25—EMANUEL—1964
W. Smith, Swainsboro, President
E. Powell, Swainsboro, Secretary

26—FLINT—1963
T. Christmas, Vienna, President
Kelvin Lane, Ashburn, Secretary

27—FLOYD—1964
ven B. Smith, Rome, President
ff Moore, Rome, Secretary

28—ELBERT-FRANKLIN-HART—1964
bert F. Sullivan, Carnesville, President
iney A. Garrett, Hartwell, Secretary

29—FULTON—1964
omas J. Anderson, Atlanta, President
W. Moore, Atlanta, Secretary

30—GLYNN—1964
R. Jennings, Brunswick, President
orge B. Wheeler, Brunswick, Secretary

31—GORDON—1964
D. Walter, Calhoun, President
ron Steele, Fairmont, Secretary

32—GRADY—1963
K. Singleton, Cairo, President
rtin Bailey, Cairo, Secretary

33—HABERSHAM—1964
ice Swain, Clarkesville, President
G. Hicks, Jr., Clarkesville, Secretary

34—HALL—1964
mil Murray, Gainesville, President
Lowell Peacock, Gainesville, Secretary

36—PEACH BELT—1964
V. Anders, Warner Robins, President
bert A. Carter, Warner Robins. Secretary

37—JACKSON-BARROW—1963
Griffith, Commerce, President
A. Rogers, Jr., Commerce, Secretary

38—JASPER—1964
C. Barrow, Monticello, President
M. Lancaster, Shady Dale, Secretary

39—JEFFERSON—1963
Roy Williams, Wadley, President
n Pilcher, Wrens, Secretary

40—JENKINS—1964
W. Hillis, Jr., Millen, President
P. Mulkey, Millen, Secretary

41—LAMAR—1962
H. Jackson, Barnesville, President
. Traylor, Barnesville, Secretary

42—LAURENS—1964
d P. Chambless, Dublin, President
es Kibler, Dublin, Secretary

44—McDUFFIE—1964
E. L. Cook, Thomson, President
John W. Lemley, Thomson, Secretary

45—MERIWETHER-HARRIS—1964
J. Emmett Collins, Manchester, President
H. Calvin Jackson, Manchester, Secretary

46—MITCHELL—1964
W. C. Arwood, Pelham, President
A. A. McNeill, Jr., Camilla, Secretary

47—MUSCOGEE—1964
Randolph A. Chipman, Columbus, President
Edmund M. Molnar, Columbus, Secretary

48—NEWTON-ROCKDALE—1963
E. J. Calloway, Covington, President
G. G. Tuck, Covington, Secretary

49—OCONEE VALLEY—1964
J. Lee Parker, Greensboro, President
H. A. Thornton, Greensboro, Secretary

50—OCMULGEE—1964
Maurice F. Arnold, Hawkinsville, President
Roy L. Johnson, Eastman, Secretary

51—POLK—1964
Don Schmidt, Cedartown, President
William Blanchard, Cedartown, Secretary

52—RABUN—1962
J. C. Dover, Clayton, President
John T. Norman, Clayton, Secretary

53—RANDOLPH-STEWART-TERRELL—1963
Earl Mayo, Richland, President
Carl E. Sills, Cuthbert, Secretary

54—RICHMOND—1964
A. J. Green, Augusta, President
Henry D. Scoggins, Augusta, Secretary

55—SCREVEN—1964
Katrine R. Hawkins, Sylvania, President
G. B. Hogsette, Sylvania, Secretary

56—SOUTH GEORGIA—1964
T. H. Smith, Jr., Valdosta, President
B. S. Davis, Valdosta, Secretary

57—SOUTHEAST GEORGIA—1964
A. J. Yates, Soperton, President
L. C. McRae, Glenwood, Secretary

58—SOUTHWEST GEORGIA—1963
H. L. Lassiter, Arlington, President
R. E. Jennings, Arlington, Secretary

59—SPALDING—1964
Ira H. Slade, Jr., Griffin, President
T. L. Lipscomb, Griffin, Secretary

60—STEPHENS—1963
Robert E. Thompson, Toccoa, President
Irving D. Hellenga, Toccoa, Secretary

61—SUMTER—1963
W. R. Anderson, Americus, President
H. L. Simpson, Americus, Secretary

63—TAYLOR—1964
R. C. Montgomery, II, Butler, President
E. C. Whatley, Reynolds, Secretary

64—TELFAIR—1963
F. R. Mann, Jr., McRae, President
D. B. McRae, McRae, Secretary

65—THOMAS-BROOKS—1964
Milton G. Middleton, Thomasville, President
J. B. Neel, Thomasville, Secretary

66—TIFT—1964
Charles Zimmerman, Tifton, President
F. Morris Davis, Tifton, Secretary

67—TRI COUNTY

68—TROUP—1964
Ivory Suit, LaGrange, President
J. F. Krafka, LaGrange, Secretary

69—UPSON—1964
J. D. Blackburn, Thomaston, President
L. L. Allen, Thomaston, Secretary

70—WALKER-CATOOSA-DADE—1964
William D. Crawley, Rossville, President
M. K. Cureton, Lafayette, Secretary

71—WALTON—1964
Robert M. Tankesley, Monroe, President
J. H. Barton, Social Circle, Secretary

72—WARE—1964
W. L. Flesch, Waycross, President
J. Duncan Farris, Waycross, Secretary

73—WARREN—1962
H. B. Cason, Warrenton, President

74—WASHINGTON—1964
Louis R. Harvey, Sandersville, President
Dean Holmes, Sandersville, Secretary

75—WAYNE—1964
O. O. McGahee, Jesup, President
D. H. G. Glover, Jesup, Secretary

76—WHITFIELD—1964
Sidney L. Sellers, Dalton, President
Donald Thomas, Dalton, Secretary

78—WILKES—1964
C. E. Wills, Jr., Washington, President
J. E. Pollock, Jr.,, Washington, Secretary

79—WORTH—1964
J. L. Tracy, Sylvester, President
H. G. Davis, Jr., Sylvester, Secretary

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee / January 22, 1964

Appointed to the Medical Indigency Committee: James N. Brawner, E. B. Dunlap and Charles P. Adams, Atlanta. Report on committee will be made following February 2 meeting.

Voted to reappoint J. Frank Harris, Atlanta, to another three-year term on Interprofessional Council.

Approved, the attendance of Walter Bloom, Atlanta, as MAG representative to AMA Congress on Medical Education, February 8-11, Chicago.

Appointed, Eustace A. Allen, Atlanta, as Chairman of the MAG-AMA Delegation for 1964.

Held in conjunction, Long Range Business Meeting and February Executive Committee Meeting, February 8 at Milledgeville to enable participants to attend Mental Health Conference, February 9, Milledgeville.

Voted to send MAG representatives to AMA Legal Conference, April 16-18, and to encourage MAG attorneys to attend same.

Voted and approved to purchase a new Multilith machine for Headquarters Office.

Voted to ask Thomas N. Lumsden, Clarkesville, Chairman of MAG Rural Health Sub-committee, to represent MAG on an Advisory Committee to help arrange the program for Georgia Teen-Age Health Education Week.

Woman's Auxiliary/Medical Association of Georgia

39th Annual Meeting

May 3-6, 1964
Macon, Georgia

Woman's Coin of Exchange

Information—*AMA NEWS, Bulletin* Plans and Program 1963-64, Directory WAMAG The Pulse Line, Annual Reports, 1962-63

Donations—AMA-ERF—Challenge of the Loan Guarantee Fund—Funds for Medical Schools; W. R. Dancy Student Loan

Enlistment — Membership—"Women in Action is Power"

Americanism — Legislation "Operation Hometown"

Subject Matter — Preparation for Participation and Priority Projects

and

Survival — Civil Defense—Minute Women of Today

Educate — A-Z of Health Careers

Relief — International Health Activities Hope

Vision — Mental Health 'A Cry for Help'

Interest — Rural Health Immunization

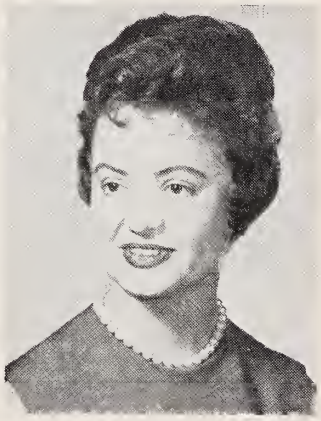
Crusade — Safety—Proper Use of Guns

Evaluation of Community Service at the Crossroads

President's Invitation

MEMBERS OF THE Woman's Auxiliary to the Medical Association of Georgia, it is my earnest hope that each of you will plan to attend the Annual Convention. It is a wonderful opportunity for contact with friends old and new—a time to evaluate the accomplishments of the past year—a tempo pace-setter for new Ideas and Service.

Sincerely,
Mrs. John E. Porter
President, Woman's Auxiliary to the Medical Association of Georgia



Welcome to Macon

MAY I EXTEND to you all a very warm welcome from the Woman's Auxiliary to the Bibb County Medical Society. It is our hope that the 1964 convention will be a memorable one for you all.

Please allow us the privilege of assisting you in any way during your visit to Macon.

Most sincerely,
Mrs. Ralph G. Newton, Jr.
President, Woman's Auxiliary to the Bibb County Medical Society

ORGANIZATION of the Woman's Auxiliary to the Medical Association of Georgia

Officers, 1963-1964

President—Mrs. John E. Porter.....Savannah
President-Elect—Mrs. John T. Leslie.....Avondale Estates
First Vice-President—Mrs. Carl S. Pittman, Jr.....Tifton
Second Vice-President—Mrs. Hayward Phillips.....Augusta
Third Vice-President—Mrs. John A. Meier.....Albany
Recording Secretary—Mrs. S. William Clark.....Waycross
Corresponding Secretary—Mrs. Hollis E. Puckett.....Savannah
Historian—Mrs. James M. Skinner.....Griffin
Treasurer—Mrs. John T. Godwin.....Atlanta
Parliamentarian—Mrs. J. R. Shannon Mays, Jr.....Macon

Advisory Committee

Dr. Ralph W. Fowler, *Chairman*.....Marietta
Dr. George R. Dillinger, *President Ex-officio*.....Thomasville
Dr. J. G. McDaniel, *Ex-officio*.....Atlanta
Dr. Virgil B. Williams, *Ex-officio*.....Griffin
Dr. Remer Y. Clark.....Marietta
Dr. John E. Porter.....Savannah
Dr. Ennis W. Waldemayer.....Americus
Dr. T. A. Peterson.....Savannah

Chairmen of Standing Committees

Achievement Award—Mrs. Floyd S. Sanders.....Decatur
American Medical Association
Education and Research Foundation—Mrs. W. P. Stoner..Sylvester
Archives—Mrs. Everet A. Bancker.....Atlanta
Auxiliary Headquarters—Mrs. Hugh Colquitt.....Marietta
Co-Chairman—Mrs. Ralph Fowler.....Marietta
Brawner Trophy—Mrs. Ennis W. Waldemayer.....Americus
Budget and Finance—Mrs. William J. Pendergrast.....Atlanta
Bulletin—Mrs. Louie H. Griffin.....Claxton
Bylaws and Procedures—Mrs. Charles R. Smith.....Columbus
Civil Defense—Mrs. Frank E. Morgan.....Decatur
Community Service—Mrs. Hayward Phillips.....Augusta
Doctor's Day—Mrs. Roy G. Duncan.....Marietta
Publicity and Editorial—Mrs. Robert Mainor.....Smyrna
Assistant Editor—Mrs. James H. Manning.....Marietta
Health Careers—Mrs. W. A. Mendenhall.....Chamblee
Assistant Chairman—Mrs. C. A. N. Rankine.....Atlanta
International Health Affairs—Mrs. Oscar Lott.....Savannah
Legislation—Mrs. John A. Meier.....Albany
Membership—Mrs. John T. Leslie.....Decatur
Mental Health—Mrs. Joseph Borhorfoush.....Milledgeville
Program—Mrs. Carl S. Pittman, Jr.....Tifton
Research in Romance of Medicine—Mrs. Clyde Burgamy....Augusta
Rural Health—Mrs. John D. Farris.....Waycross
Safety—Mrs. Abram O. Goldsmith.....Albany
Scrapbook—Mrs. Richard B. Ewing.....Macon
State Handbook—Mrs. W. P. Rhyne.....Albany
W. R. Dancy Student Loan Fund—Mrs. F. N. Harrison....Augusta

Chairmen of Special Committees

Crawford W. Long Note Paper—Mrs. E. V. Patrick.....Carrollton

District Councilors

First—Mrs. Robert S. Robinson.....Metter
Second—Mrs. Laurier Hackett.....Camilla
Third—Mrs. Frederick H. Thompson.....Americus
Fourth—Mrs. J. R. Mincey.....Thomaston
Fifth—Mrs. John T. Leslie.....Decatur
Sixth—Mrs. Thomas L. Ross, Jr.....Macon
Seventh—Mrs. James H. Manning.....Marietta
Eighth—Mrs. R. A. Pumpelly.....Jesup
Ninth—Mrs. John H. Reed.....Gainesville
Tenth—Mrs. Theodore Everett.....Augusta

Councilor, Woman's Auxiliary to the Southern Medical Association

Mrs. Carl P. Savage, Sr.....Montezuma

County Auxiliary Presidents

Baldwin—Mrs. Edwin W. Allen, Jr.....Milledgeville
Bibb—Mrs. Ralph Newton, Jr.....Macon
Bulloch-Chandler-Evans—Mrs. Robert S. Robinson.....Metter
Carroll-Douglas-Haralson—Mrs. T. M. Martin, Jr.....Carrollton
Chatham—Mrs. Harry E. Rollings.....Savannah
(Georgia Medical Society)
(Bryan, Long, Liberty, Effingham, McIntosh)
Chattahoochee—Mrs. George Tottle.....Duluth
(Gwinnett, Forsyth)
Cherokee-Pickens—Mrs. C. James Roper.....Jasper
Cobb—Mrs. Howard M. Sigel.....Smyrna
Coffee—Mrs. Richard Benson.....Broxton
Colquitt—Mrs. Fred D. Cheney.....Moultrie
Crawford W. Long (Clarke)—Mrs. John M. Wilkins.....Athens
DeKalb—Mrs. Luther H. Vinton, Jr.....Avondale Estates
Dougherty—Mrs. Thomas D. Johnson.....Albany
Elbert-Franklin-Hart—Mrs. Stewart D. Brown, Jr.....Royston
Flint—Mrs. Pierce Lee Williams, Jr.....Cordele
(Crisp, Turner, Dooly)
Floyd—Mrs. Clarence Sapp.....Rome
Fulton—Mrs. Milton F. Bryant, Jr.....Atlanta
Glynn—Mrs. Robert Perry.....Brunswick
Gordon—Mrs. Robert D. Walter.....Calhoun
Habersham (Towns-White)—Mrs. Thomas L. Hodges....Clarkesville
Hall-Lumpkin—Mrs. A. Frederick Bloodworth.....Gainesville
Mitchell—Mrs. Joseph F. Doyle.....Camilla
Muscogee—Mrs. A. J. Kravtin.....Columbus
Ocmulgee—Mrs. Richard L. Smith.....Cochran
(Bleckley, Dodge, Pulaski, Wilcox)
Peach Belt—Mrs. E. Faxton Seay.....Fort Valley
Richmond—Mrs. Williams A. Wilkes.....Augusta
South Georgia—Mrs. James L. Parrott.....Hahira
(Lowndes, Lanier, Berrien, Cook, Clinch)
Southeast Georgia—Mrs. Andrew Joseph Yates, Jr.....Soperton
Southwest Georgia—Mrs. James H. Crowdis, Jr.....Blakely
(Calhoun, Early, Miller, Baker, Clay)
Spalding—Mrs. George W. Brown.....Griffin
Stephens—Mrs. William H. Good, Jr.....Toccoa
Sumter-Schley-Macon-Marion—Mrs. W. F. Castellow.....Americus
Thomas-Brooks—Mrs. Rudolph Bell.....Thomasville
Tift—Mrs. W. L. Bridges, Jr.....Tifton
Troup-Heard—Mrs. Curran S. Easley, Jr.....LaGrange
Upson—Mrs. R. J. Mincey.....Thomaston
Walker-Catoosa-Dade—Mrs. Howard Derrick, Jr.....Lafayette
Ware—Mrs. Leo Smith.....Waycross
Whitfield-Murray—Mrs. Earl T. McGhee.....Dalton
Worth—Mrs. Norman Crowe.....Sylvester

Past Presidents and Conventions

Honorary Presidents for Life
Mrs. James N. Brawner, Sr., Atlanta
Mrs. Eustace A. Allen, Atlanta

1924—Augusta (Organization)—Mrs. C. W. Roberts.....Atlanta
(Deceased), Temporary Chairman
1925—Atlanta—Mrs. James N. Brawner, Sr.....Atlanta
1926—Albany—Mrs. William H. Myers.....Savannah
1927—Athens—Mrs. C. W. Roberts (deceased).....Atlanta
1928—Savannah—Mrs. Paul Holiday (Mrs. J. C. Moore, Gaffney, S. C.)
1929—Macon—Mrs. Charles C. Hinton.....Macon
1930—Augusta—Mrs. Marion T. Benson (deceased).....Atlanta
1931—Macon—Mrs. Charles C. Harrold (deceased).....Macon
1932—Savannah—Mrs. Ralston Lattimore.....Savannah
1933—Macon—Mrs. S. T. R. Revell.....Louisville
1934—Augusta—Mrs. J. Bonar White (deceased).....Atlanta
1935—Atlanta—Mrs. J. E. Penland.....Waycross
1936—Savannah—Mrs. Ernest R. Harris (deceased).....Winder
1937—Macon—Mrs. W. R. Dancy.....Savannah
1938—Augusta—Mrs. Ralph H. Chaney.....Augusta
1939—Atlanta—Mrs. Warren A. Coleman.....Eastman
1940—Savannah—Mrs. Eustace A. Allen.....Atlanta
1941—Macon—Mrs. H. G. Bannister.....Ila
1942—Augusta—Mrs. Lee Howard.....Savannah
1943—Atlanta—Mrs. J. Lon King.....Macon
1944—Savannah—Mrs. Olin S. Cofer.....Atlanta
1945—No Convention
1946—Macon—Mrs. W. T. Randolph.....Winder
1947—Augusta—Mrs. W. Bruce Schaefer.....Toccoa
1948—Atlanta—Mrs. W. G. Elliott.....Cuthbert
1949—Savannah—Mrs. S. A. Anderson.....Atlanta
1950—Macon—Mrs. J. Harry Rogers.....Atlanta
1951—Augusta—Mrs. Lehman W. Williams.....Savannah
1952—Atlanta—Mrs. J. R. S. Mays.....Macon
1953—Savannah—Mrs. Ralph W. Fowler.....Marietta
1954—Macon—Mrs. Leo Smith.....Waycross
1955—Augusta—Mrs. Shelley C. Davis.....Atlanta
1956—Atlanta—Mrs. Robert C. Major.....Augusta
1957—Savannah—Mrs. Walker L. Curtis.....College Park
1958—Macon—Mrs. John L. Elliott.....Savannah
1959—Augusta—Mrs. Luther H. Wolff.....Columbus
1960—Columbus—Mrs. Remer Y. Clark.....Marietta
1961—Atlanta—Mrs. W. P. Rhyne.....Albany
1962—Savannah—Mrs. A. Worth Hobby.....Atlanta
1963—Jekyll Island—Mrs. Ennis W. Waldemayer.....Americus
1964—Macon—Mrs. John E. Porter.....Savannah

Convention Committees

WOMAN'S AUXILIARY TO BIBB COUNTY MEDICAL SOCIETY

General Chairmen

Mrs. John I. Hall, *Chairman*
Mrs. W. Earl Lewis, *Co-Chairman*
Mrs. Leonard H. Campbell, *Co-Chairman*

Credentials and Registration

Mrs. George Y. Massenburg, *Chairman*
Mrs. H. Torrey Bloodworth, *Co-Chairman*

Publicity

Mrs. Henry T. Clay, *Chairman*
Mrs. Calder B. Clay, Jr., *Co-Chairman*

Memorial Service
Mrs. Thomas L. Ross, *Chairman*
Mrs. Edmund A. Brannen, *Co-Chairman*

Display and Meeting Room
Mrs. Thomas H. Williams, *Chairman*
Mrs. James W. Burnham, *Co-Chairman*

Tour and Transportation
Mrs. Rudolph W. Jones, Jr., *Chairman*
Mrs. Walter F. Homeyer, *Co-Chairman*

Tea
Mrs. Ernest Corn, *Chairman*
Mrs. Hudnall G. Weaver, *Co-Chairman*

Hostesses for Cannonball House
Mrs. Charles N. Wasden, *Chairman*
Mrs. Waddell Barnes, *Co-Chairman*

Hostesses for Home of Dr. and Mrs. Benjamin Bashinski, Jr.
Mrs. Benjamin Bashinski, Jr., *Chairman*
Mrs. Benjamin Bashinski, *Co-Chairman*

Executive Board Meetings
Mrs. Richard B. Ewing, *Chairman*
Mrs. Robert W. Edenfield, *Co-Chairman*

Past Presidents' Luncheon
Mrs. J. R. Shannon Mays, *Chairman*

Finance
Mrs. Robert E. Cato, *Chairman*
Mrs. Benjamin Bashinski, Jr., *Co-Chairman*

Pages for Auxiliary
Mrs. David S. Mann, *Chairman*
Mrs. Charles Duggan, Jr., *Co-Chairman*

Specialty Committee
Mrs. John C. Martin, *Chairman*

Pages for Medical Association
Mrs. William H. Somers, *Chairman*
Mrs. Waldo E. Floyd, *Co-Chairman*

Recognition Luncheon
Mrs. William W. Orr, *Chairman*
Mrs. Ferdinand V. Kay, *Co-Chairman*

Luncheon—Luau
Mrs. Leo Eberle, *Chairman*
Mrs. Charles G. Magnan, *Co-Chairman*

Entertainment for Luau
Mrs. Milledge C. Newton, *Chairman*

President's Banquet
Mrs. Joe W. Daniel, Jr., *Chairman*
Mrs. Reese C. Eberhardt, *Co-Chairman*

Hospitality
Mrs. W. Morris Brown, *Chairman*

Tellers
Mrs. Richard B. Ewing, *Chairman*

Timekeepers
Mrs. W. P. Rhyne
Mrs. Remer Y. Clark

Pledge of Loyalty to the Woman's Auxiliary Medical Association of Georgia

"I pledge my loyalty and devotion to the Woman's Auxiliary to the Medical Association of Georgia. I will support its activities, protect its reputation, and ever sustain its high ideals."

Collect

"Keep us, O God, from pettiness; let us be large in thought, word and deed. Let us be done with faultfinding, and leave off self-seeking. May we put away pretense, and meet each other face to face, without self-pity and without prejudice.

May we never be hasty in judgment, and always generous. Let us take time for all things; make us to grow calm, serene, gentle.

Teach us to put into action our better impulses, straightforward and unafraid. Grant that we may realize it is the little things that create differences; but in the big things of life we are one.

And, may we strive to reach and to know the great, common woman's heart of us all, and O, Lord, let us not forget to be kind."

The Program

SUNDAY, MAY 3

11:00 to 5:00 Registration

Mezzanine, Dempsey Hotel

Hospitality

Note: The Idle Hour Country Club will be open for dinner Sunday evening, May 3, for the convenience of out-of-town guests. The dining room will be closed at 10 P.M.

1:00 Pre-Convention Executive Board Meeting—Dutch Luncheon

Empire Room, Dempsey Hotel

PRESIDING
Mrs. John E. Porter

INVOCATION
Mrs. James N. Brawner, Sr., Atlanta

PLEDGE OF LOYALTY AND COLLECT
Mrs. Laurier Hackett, Camilla

2:00 MAG General Business Session

Auditorium, Main Meeting Room

PRESIDING
George R. Dillinger, President

NOMINATION OF OFFICERS AND COUNCILORS

NOMINATIONS FOR AWARDS: GENERAL PRACTITIONER OF THE YEAR AWARD
(To be voted on by the House of Delegates)
HARDMAN AWARD
MAG MEMORIAL SERVICE

MONDAY, MAY 4

8:30 to 3:30 Registration

Mezzanine, Dempsey Hotel

9:00 Joint Meeting—MAG House of Delegates and Woman's Auxiliary

Auditorium, Main Meeting Room

ORDER OF BUSINESS *(See MAG House of Delegates Handbook)*

REPORT OF PRESIDENT, WOMAN'S AUXILIARY TO MAG
Mrs. John E. Porter, Savannah

9:30 General Meeting

Walter Little Room, Dempsey Hotel

CALL TO ORDER
Mrs. John E. Porter

INVOCATION
Rev. Alvin H. Brackett, Ingleside Baptist Church, Macon

PLEDGE OF LOYALTY AND COLLECT
Mrs. Robert S. Robinson, Metter, President, Woman's Auxiliary to Bulloch-Chandler-Evans Medical Society
ADDRESS OF WELCOME
Mrs. Ralph G. Newton, Jr., Macon, President, Woman's Auxiliary to the Bibb County Medical Society
RESPONSE TO WELCOME
Mrs. Abraham J. Kravtin, Columbus, President, Woman's Auxiliary to Muscogee County Medical Society
PRESENTATION OF CONVENTION PLANS
Mrs. John I. Hall, Macon, General Convention Chairman
INTRODUCTION OF PAGES FOR THE DAY
Mrs. David S. Mann, Macon
REPORT OF THE ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY TO THE MAG
Ralph W. Fowler, M.D., Marietta
GREETINGS
George R. Dillinger, M.D., Thomasville, President, MAG
J. G. McDaniel, M.D., Atlanta, President-Elect, MAG
INTRODUCTION OF PAST PRESIDENTS, HONOR GUEST AND GUEST SPEAKER
Mrs. John L. Elliot, Savannah
ADDRESS
"Liberty Is a Woman"
Jack Schreiber, M.D., Canfield, Ohio, Member, Speaker's Bureau, AMA, Chicago
Miss Marilyn M. Benson, Chicago, Executive Assistant, Program Services Department, Communications Division, AMA

Business Session

CONVENTION RULES OF ORDER
Mrs. J. R. Shannon Mays, Parliamentarian
ROLL CALL
MINUTES
Mrs. S. William Clark, Jr., Waycross, Secretary
REPORTS:
President
Mrs. John E. Porter, Savannah
President-Elect
Mrs. John T. Leslie, Avondale Estates
Treasurer (including Auditor's Report)
Mrs. John T. Godwin
ADDENDUM REPORTS:
Complete Reports *(As given in 1963-64 Annual Report Book)*
Recommendations from the Executive Board Revisions
Mrs. Charles R. Smith, Columbus, Chairman, By-Laws and Procedures
Report of Credentials Committee
Mrs. George Y. Massenburg, Macon
ANNOUNCEMENTS
RECESS OF SESSION

1:00 Recognition Luncheon (Dutch)
Diplomat Room, Ambassador Motel
Honoring County Presidents, Presidents-Elect and District Councilors (all attending convention invited)
PRESIDING
Mrs. John T. Leslie, Avondale Estates, President-Elect

1:00 Dutch Luncheon
(For Past Presidents of Woman's Auxiliary to the MAG)
Sidney Lanier Cottage
PRESIDING
Mrs. Ennis W. Waldemayer, Americus, Immediate Past President

3:00 to 5:00 Tour of Cannonball House, now U.D.C. Museum
Home of Dr. and Mrs. Benjamin Bashinski, Jr.
445 Lamar Drive
Tea at home of Dr. and Mrs. Ernest Corn
607 College Street

TUESDAY, MAY 5

8:30 to 11:30 Registration
Mezzanine, Dempsey Hotel
Hospitality
To Be Announced

9:30 Continued General Meeting
Walter Little Room, Dempsey Hotel
CALL TO ORDER
Mrs. John E. Porter, Savannah, President
INVOCATION
Msgr. Thomas I. Sheehan, Pastor, St. Joseph's Catholic Church
IN MEMORIAM:
Mrs. Thomas L. Ross, Jr.
PLEDGE OF LOYALTY AND COLLECT
Mrs. Luther M. Vinton, Jr., Avondale Estates, President of Woman's Auxiliary to the DeKalb County Medical Society
INTRODUCTION OF PAGES FOR THE DAY
Mrs. Charles R. Duggan, Jr., Macon, Co-Chairman
ANNOUNCEMENT OF CONVENTION PLANS
Mrs. W. Earl Lewis, Macon, General Convention Chairman

Business Session

ROLL CALL AND MINUTES
Mrs. S. William Clark, Jr., Waycross, Secretary
REPORT OF REVISIONS COMMITTEE
Mrs. Charles R. Smith, Columbus, Chairman
REPORT OF BUDGET AND FINANCE COMMITTEE
Mrs. William J. Pendergrast, Atlanta, Chairman
REPORT OF RESOLUTIONS COMMITTEE
Mrs. William A. Wilkes, Augusta
REPORT OF CREDENTIALS COMMITTEE
Mrs. H. Torrey Bloodworth, Macon
REPORT OF COURTESY COMMITTEE
Mrs. Talmage Martin, Jr., Carrollton

Report of Awards Committee
Achievement
Mrs. Floyd R. Sanders, Jr., Decatur
Civil Defense
Mrs. Frank E. Morgan, Decatur, Chairman
Doctor's Day
Mrs. Roy G. Duncan, Marietta, Chairman
Mrs. J. Bonar White Scrapbook
Mrs. Richard B. Ewing, Macon, Chairman
Safety
Mrs. Abram O. Goldsmith, Albany, Chairman
Brawner Trophy of General Excellence
Mrs. Ennis W. Waldemayer, Americus, Chairman
Report of the Nominating Committee
Mrs. Ennis W. Waldemayer, Americus, Chairman
Election of Officers
Installation of Officers
Mrs. J. R. Shannon Mays, Macon, Parliamentarian
Presentation of Past President's Pin and Gavel
Mrs. John E. Porter, Savannah, Retiring President
Inaugural Address and Announcements of 1964-65 Chairmanships
Mrs. John T. Leslie, Avondale Estates
Presentation of Past President's Pin
Mrs. Ennis W. Waldemayer, Americus
Announcements
Adjournment Promptly at 12 Noon

1:30 Luau Luncheon—Auxiliary Members
Idle Hour Country Club
(Attire optional. Suggest casual Hawaiian)
PRESIDING
Mrs. John E. Porter, Savannah, Retiring President

WEDNESDAY, MAY 6

9:00 Post-Convention Executive Board Meeting—Dutch Breakfast
(For 1964-65 Officers, Chairmen, District Councilors, County Presidents, County Presidents-Elect, Past Presidents and Councilor to SMA)
Empire Room, Dempsey Hotel
PRESIDING
Mrs. John T. Leslie, Avondale Estates, President
Adjournment to 39th Annual Meeting
Joint Session . . .
Auditorium, Main Meeting Room
(All MAG, Auxiliary Members and Guests)

Rules to Govern the Convention

1. The voting body of the convention shall consist of the members of the Executive Board of the Woman's Auxiliary to the Medical Association of Georgia and the duly accredited delegates from the county auxiliaries. No one is entitled to vote until registered.
2. To gain recognition, a delegate is requested to rise, address the chair, give her name and the name of her auxiliary.
3. No delegate shall speak more than twice on the same subject, and is limited to two minutes each time.
4. Badges must be worn by members of the voting body during all general sessions of the convention.
5. Delegates' privileges are not transferable.
6. All motions shall be presented in writing to the Recording Secretary. They shall be signed by the persons making and seconding the motion.
7. All original motions on resolutions shall be made by submitting two copies, one to the Resolution Committee and one to the Recording Secretary.
8. All persons appearing on the program must be seated near the platform when the session opens.

Whispering greatly retards the business of the meeting. Order must be maintained at all times. Please be prompt. Meetings will begin promptly at the time announced.

PRESCRIPTION COSTS REVIEWED

Buying a new shirt or three pairs of nylons or having a prescription filled all cost about the same, the drug industry reported this week.

The Pharmaceutical Manufacturers Association reported that the average prescription cost $3.26 at the end of 1962. At the same time the average earning of U.S. manufacturing production workers was $96.96 per week and it took the worker an hour and 22 minutes to earn enough for his prescription.

A typical "low-priced" car was "earned" in 1,132 hours, PMA said, while a tankful of gas "cost" two hours and 15 minutes' work and a carton of cigarettes was worth an hour's labor.

The association said the average employee worked nearly three hours for a tooth extraction, 44 minutes for a haircut, half an hour for a six-pack of beer and 25 minutes for a movie ticket.

The comparative figures all were computed from the most recently available federal government economic data.

In the prescription category, a 51- minute "bargain" was a dozen tablets of life-saving penicillin. Other medications ranged from the 46-minute sedative to the one-hour-50-minute antibiotics.

SELECTION OF AN AGE LIMIT IN THE RADIOACTIVE IODINE TREATMENT OF THYROTOXICOSIS

John B. Stanbury, M.D., *Boston, Massachusetts*

■ ***A re-appraisal of the status of I-131 in the treatment of thyrotoxicosis is made.***

WITHIN THE PAST two years, three patients of unusual interest have come to my attention. The first of these was a young woman, a singer, who required surgery for the removal of a toxic goiter. The entire procedure and her convalescence were uneventful, except for the fact that in the course of the resection of the gland, one of the recurrent laryngeal nerves was inadvertently severed. The second patient was a 14-year-old girl who had a large toxic goiter. This had been treated elsewhere for several weeks with propylthiouracil, but the response was incomplete, and the goiter was increasing in size. Upon admission to the hospital it was discovered that the total white blood cell count was less than 1,000. The propylthiouracil was discontinued, she was treated with reserpine and iodine, and within five days had a satisfactory response and underwent an uneventful thyroidectomy, but postoperatively developed tetany and has required vigorous therapy for what appears to be permanent hypoparathyroidism ever since.

The third patient was a 16-year-old male who had developed jaundice in the course of propylthiouracil therapy for Graves' disease. The medication had been discontinued, and the disease had recurred. He was prepared for surgery with iodide and was seemingly euthyroid at the time of surgery. During the surgical procedure there was a cardiac arrest. Normal rhythm was finally restored after ten minutes of vigorous resussitative efforts.

These three unhappy experiences in the surgical treatment of Graves' disease were not at the hands of unskilled surgeons, but rather, the patients were treated by staff surgeons of long experience with thyroid surgery. Accidents of these kind fortunately are rare; their occurrence has suggested the desirability of a reappraisal of the indications and limitations of another form of therapy, radioactive iodine. It is the purpose of this communication to review the evidence bearing on the selection of an age limit in the radioactive iodine treatment of thyrotoxicosis and to communicate a personal set of guide lines for the selection of patients and for their aftercare.

History of the Age Limit

When radioactive iodine therapy of Graves' disease was introduced in 1941, little consideration was given to the problem of late carcinogenic or other untoward effects of this form of treatment. Gradually over the next several years, there was increasing concern for the possibility of late undesirable effects of radioactive iodine, and when I^{131} became available in late 1945, many clinics throughout the country decided that it would be quite unwise at the level of knowledge then existing to treat young patients with this medication. Initially there was little or no experience for guidance in selecting an age limit, but generally the age of 45 was chosen. Persons below this age were not given radioiodine except in circumstances which made other forms of treatment undesirable. The age of 45 was chosen perhaps for two reasons. In the first place, child-bearing has ceased by the age of 45. Further, assuming that the mean time from irradiation to carcinogenesis is 25 years, then this span would bring patients treated at age 45 close to the mean life expectancy. In essence, the choice of age 45 was arbitrary.

As the years passed, and as the evidence accumulated, many clinics suspended or radically modified the age limit. In the author's own clinic the age limit was reduced to 40 years in the early 1950's, and within the past two years, on further review of available information, this limit has been reduced to 25. It is only fair to say that there is no consensus, even among those attending this small clinic. Still more recently this limit has been liberalized to the point where even younger patients are now permitted to receive radioactive iodine.

The principal deterrents to full acceptance of

From the Departments of Medicine, Harvard Medical School and the Massachusetts General Hospital (Thyroid Unit), Boston, Massachusetts.

Presented to the Department of Medicine, Emory University School of Medicine, Atlanta, Georgia, at Grady Memorial Hospital, September 27, 1963.

radioactive iodine have, of course, been the possibility that the isotope may cause cancer of the thyroid, or elsewhere, or leukemia, or that it might inflict genetic damage on the germ cells. What appears to be the really important deterrent to radioiodine therapy is only now emerging, as we shall see. These problems will be reviewed one by one.

The Thyroid, Radiation, and Cancer

The radiation dose delivered to the thyroid gland in the course of radioiodide treatment for thyrotoxicosis is well above that which is known to cause cancer in other organs. Depending on the size of the gland and the retention of the isotope by the gland, and the dose administered, from eight to 12,000 rads or more may be delivered to the thyroid. If a subsequent treatment is necessary because of incomplete response to the first, additional radiation is delivered to that structure. This dose of radiation is in excess of that which has caused skin or bone cancer[1]. The latency of these tumors after radiation varies widely. Some of the osteogenic sarcomas appeared as early as seven years after initial exposure to radium and mesothorium in the radium dial painter group[2]. Skin tumors may have a latency of 30 to 40 years. As one considers the safety of radioiodine therapy, he can derive scant comfort either from dose considerations or from the fact that tumors seem not to have appeared during the first two decades of radioiodine therapy.

Reason Unknown

It is not known exactly how radiation produces cancer, but it has been known for 35 years that radiation increased the mutation rate[3, 4]. It was for this finding that Mueller was given a much deserved Nobel prize. Induction of mutations in bacteria by radiation has become an important experimental tool in studying intermediary metabolism. It is now known that highly abnormal chromosomal patterns may appear in white blood cells cultured from patients previously treated with X-ray[4]. Cell cultures from the skin after irradiation may show bizarre chromosomal patterns[5]. Hall has found that synthesis of ribonucleic acid is exquisitely sensitive to radiation[7]. The changes which may be produced in the genetic structure by radiation range all the way from point mutations at a single genetic locus or even in a single DNA-base pair, to what might be called chromosomal catastrophes, where these structures may undergo fragmentation or translocation, or duplication. There is little question but that these alterations in nuclear structure are related to those cellular changes which we now recognize as neoplasia.

Radiation derived from radioiodine can cause malignant tumors to develop in the thyroid gland of experimental animals. Doniach[8] found that if he gave five to 30 uc of I^{131} to young rats and followed this with chronic administration of methylthiouracil, malignant tumors developed after several months in the thyroid, but if he gave 100 uc no tumors occurred. The radiation dose in these experiments was from 2,270 to 16,200 rep. Several other investigators have also produced thyroid neoplasms with I^{131}, but usually only if the isotope was followed either by a drug such as methylthiouracil which causes the gland to become hyperplastic or a drug which in itself is carcinogenic[9, 10, 11].

It is now well established that prior irradiation into the thyroid region in the young is closely related to subsequent development of neoplastic changes in the thyroid. This was first observed by Duffy and Fitzgerald[12] and shortly after was confirmed by Simpson et al[13], by Clark[14], Winship and Rogvall[15], and others, all of whom have found that a careful search of the history of patients below the age of 20 almost invariably yields a history of radiation therapy into the neck region during the first two years of life. This radiation has been given for an enlarged thymus, for tonsillitis, or for other reasons. The difficulties involved in ascertaining the true history of radiation therapy have been underlined by Ravoin et al.[16], who found only after repeated questioning that many patients whom they had earlier recorded as having had no radiation therapy, indeed had had externally administered radiation at an earlier age. We have recently seen a child with papillary carcinoma of the thyroid whose father, a radiologist, repeatedly denied any history of X-ray therapy until he was reminded by a relative that this indeed had been done during the first year of life.

A most interesting relationship between thyroid neoplasia and radiation has been uncovered by Socolow et al. in Hiroshima[17]. They found that in the years after the explosion of the first atomic bomb on that city there was a good statistical relationship between both benign and malignant thyroid tumors and the closeness of the individual subject to the explosion.

There has been much interest in the possibility that externally administered X-radiation into the thyroid region of adults can cause thyroid cancer. Doniach found that seven out of 21 rats which were given 1,100 r of X-ray and then methylthiouracil developed malignant thyroid tumors[18]. Frantz et al.[19] also have induced benign and malignant tumors in the rat by 300 to 900 r of X-ray. After canvassing 70 radiologists and 31 thyroid specialists, Quinby and Werner[20] were able to uncover records of only ten patients with cancer of the thyroid who

had received prior X-ray treatment into the head and neck, and after careful review were only able to accept three of these as having any relationship to the radiotherapy. More recently Hanford et al.[21] have found that seven out of 162 patients treated for tuberculous adenitis of the neck with five to 1,500 r developed cancer of the thyroid between ten and 27 years later.

What has the experience actually been with neoplastic diseases after radioiodine therapy? In spite of disturbing histological changes produced (Figure 1), it has been remarkably free of complication of neoplastic disease. Virtually the only confirmed case of cancer after radioiodine therapy has been reported by Sheline et al[22]. Their patient developed a nodule several years after a single dose of radioiodine. This was excised, and it has been the consensus of several consulting pathologists that the lesion is indubitably malignant. In our own 2,000 patients which have accumulated since the first treatment in 1941, there have been several who have been found subsequently with thyroid cancer, but none had developed cancer of the thyroid where there was clear evidence or even strong suspicion that there was a relationship between the radioiodine administered and the development of the tumor. A few patients have been given radioiodine for nodular goiter, and subsequently one of the nodules has proved to be malignant. The U. S. Public Health Service is now sponsoring a nationwide program for the careful follow-up of all patients treated with radioactive iodine in order to ascertain the rate of development of tumors in these patients. Over the years this program will tell us definitely whether there is a significant carcinogenic hazard from radioactive iodine.

Leukemia No Problem

Leukemia, also, has not proved to be a problem after radioiodine therapy. All patients who have developed leukemia after radioiodine have been collated by Pochin, and after a careful mathematical statistical analysis, it seems quite clear that the total number of patients at risk have developed no more cases of leukemia than would the same number of patients with the same number of years' experience, who had not had radioiodine[23]. It is interesting to note that the leukemia which has developed in patients previously treated with radioiodine has more often than not been the acute variety.

One may summarize the problem of cancer in relation to radioiodine therapy by stating that the amount of radiation delivered to the thyroid by I^{131} in the therapy of Graves' disease is comparable or exceeds that which has caused cancer elsewhere, and further, that radioactive iodine causes significant

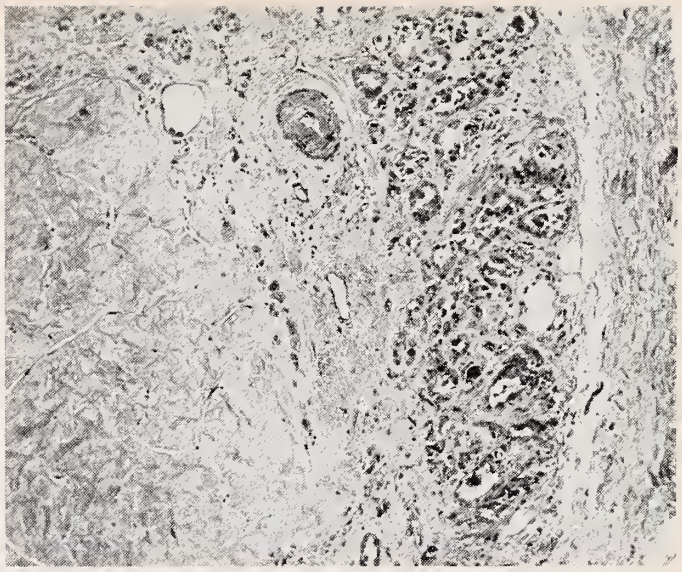


Figure 1

Photomicograph of thyroid showing scarring following I^{131} therapy. Only a few distended and damaged follicles remain at the periphery in the subcapsular zone. X 100. Courtesy of Dr. Austin Vickery.

chromosomal changes. Twenty-two years of experience, however, has failed to disclose a significant number of patients with carcinoma of the thyroid in the I^{131}-treated group, and the incidence of leukemia is certainly no higher than in a comparable control population.

The Thyroid, Genetics, and Radiation

The genetics problem in relation to I^{131} therapy is simply whether the treatment will increase the number of mutations in the descendants of the treated patient and will add to the population as a whole a significant burden of defective persons. It should be recognized that there is already a natural mutation rate of approximately four per cent. Half of these mutational changes are the result of the ambient radiation. The origin of the other half is more obscure.

DeGroot has summarized the available information and made a number of assumptions and then calculated an estimate of the genetic consequences of radioiodine treatment (cf 24 page 230 ff). In the first place, approximately eight rads are delivered to the whole body by a ten millicurie dose of I^{131} given to a patient with the average uptake and turnover of Graves' disease. The gonads receive approximately half of this dose, and if one can judge from experiments on the mouse and on the fruit fly, then four rads is approximately four per cent of the doubling dose for mutations. One can estimate that the risk of thyrotoxicosis in the population at large is about 1.4 per cent. The product of this risk, the fraction of the doubling dose and the natural mutation rate, in addition to the natural birth defect rate is .0400056. This means that, if, throughout all future generations, all patients are treated with radio-

active iodine, then one might anticipate something of the order of 56 additional recognizable mutational changes out of the 400,000 defects which appear in every ten million births.

If one considers the mutational risk in the first generation progeny of a patient treated with radioactive iodine, then the additional risk becomes .00008. This can be interpreted to mean that two out of every 1,000 birth defects in this circumstance would be mutational due to the I^{131} alone, in addition to the natural rate of four out of every 100. Of course, one must appreciate that these mutational changes are not necessarily lethal, or even dangerous, but on the whole, it is fair to assume that most mutations are harmful. If one takes these calculations at face value and uses them operationally, then he must assess the genetic risks against the costs of other forms of treatment of Graves' disease. Thus the genetic risk must be balanced off against risks of anesthesia and surgery, as well as against the morbidity involved in a surgical procedure. If chronic antithyroid drug treatment is the alternative of choice then the mutational risk must be balanced against the lack of definition of the drug treatment and the morbidity involved.

Not in Relation

It should be clear that these remarks about the genetic effects of I^{131} have not been given in relation to the fetus or the fetal thyroid. There is no argument at present concerning the undesirability of giving radioiodine at a time when there is a possibility of irradiation of the fetus. The fetal thyroid begins to accumulate radioactive iodine after the 12th gestational week, but even before this, one would not expose the fetus to any radiation, since it is generally acknowledged that fetal tissue is more susceptible to radiation than is the adult.

Unfortunately there is no clear answer which emerges from these considerations of I^{131} and genetics. No one can say whether the risk of I^{131} in this regard is too high for tolerance. At present the matter must be resolved in essence on emotional grounds: one either ignores the genetic risk or accepts it, or he rejects I^{131} therapy for any patient, male or female, who may in the future participate in procreation.

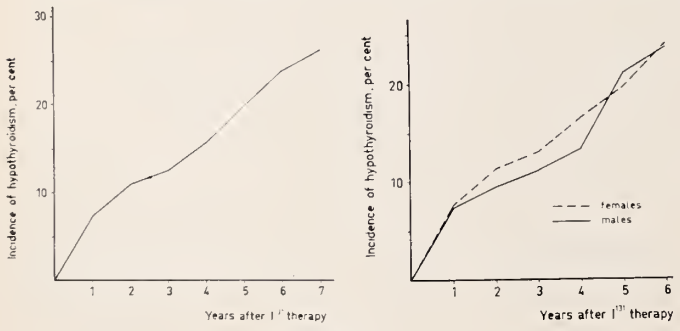


Figure 2

Incidence of hypothyroidism after I^{131} treatment of 791 patients controlled for two to eight years. Each incidence is based on the number of patients followed up. (a) Incidence at varying intervals. (b) Incidence distribution according to sex (654 females and 137 males). From Reference 25. Courtesy of the authors and ACTA RADIOLOGICA.

Radiation and Other Structures

There is little reason to suppose that radioactive iodine has any damaging effect on the parathyroids, the larynx, the kidney, the stomach, or any other tissues of the body, other than the thyroid, and the gonads, as has already been described. Parathyroid damage has been reported very rarely, and neoplasia in the larynx have not appeared in undue frequency in this group of patients. There is no evidence of renal damage, and there is no evidence of irritation of the stomach, except after huge doses of radioiodine given in treatment of carcinoma of the thyroid. There may be some temporary swelling of the salivary glands. Some tendency toward falling hair has been observed several weeks after radioiodine therapy, but this is also observed after surgical therapy, and probably is related to the change in the metabolic state of the patient, rather than to radiation damage.

Radioiodine and Myxedema

Is there any important and undesirable effect upon I^{131} treatment for Graves' disease? The answer to this question is a decided yes. For many years those involved in the treatment of thyrotoxicosis were inclined to dismiss myxedema as a trivial and acceptable complication, which seemed to be a complication in a relatively small fraction of patients. Two considerations have required some rethinking about the problem. In the first place, numerically, myxedema has ceased to be trivial. With the passage of time it has become increasingly apparent that a large number of patients develop hypothyroidism months or years after I^{131} therapy. In several series this figure has approached and indeed reached, the 20 per cent level. Einhorn in Sweden[25] in a careful statistical evaluation has reached the conclusion that an increment of approximately three per cent of the remaining euthyroid group is added each year to the hypothyroid list (Figure 2). Others, such as the group in Atlanta[26], have found an incidence of 31 per cent even within the first two or three years after radioiodine. The frequency with which hypothyroidism appears during the first year after therapy varies in the experience of several observers from approximately eight to as high as 20 per cent. After this there is an unusual increment which varies from one to three per cent. Some of these patients who

develop hypothyroidism do so gradually, but others do so precipitously even after seven years and more of euthyroid clinical state.

The problem of hypothyroidism after I^{131} therapy is not a simple matter of dose of the isotope. There is a poor correlation between the administered dose and the subsequent development of myxedema. Furthermore, there is a real possibility that reducing the present dosage standards in an endeavor to reduce the ultimate incidence of hypothyroidism will by the same token lengthen the time for recovery and increase the number of patients who require multiple doses of the radioisotope.

Serious or Fatal

A second important point is that myxedema, while a trivial complication if treated, is a highly serious and often fatal illness if neglected in the older patient. There have been many reports in recent years concerning the difficulty of treating the elderly patient with myxedema, and there is a high mortality in this group. These patients often develop congestive failure, they are susceptible to overwhelming infection, they present various and difficult problems in regulation of salt and water metabolism, and they respond poorly to replacement therapy with thyroxine or triiodothyronine. These patients and their relatives often seem unaware and unconcerned by the symptoms of myxedema and the appearance of the patient, and this contributes to the neglect of therapy until the situation is no longer reversible. As more patients are treated with radioiodine, one can predict with certainty that a medical problem of increasing difficulty would be the elderly patient who has been treated for Graves' disease, has developed myxedema for which he has been treated, and then for whatever reason has lapsed in his medication, and fallen into an advanced state of athyreosis from which recovery may be effected only with the greatest difficulty, if at all. Myxedema, then, seems to be emerging as the central problem of radioiodine therapy which far exceeds in medical importance the other feared complications of I^{131} therapy, cancer and genetic damage.

Age Limit: Present Position

The emergence of hypothyroidism as the major discernible problem attending the treatment of Graves' disease with I^{131} has been unexpected and has required a reappraisal of the indications and limits of this form of treatment. A therapeutic program which is destined to make one patient in three hypothyreotic for the rest of his life cannot be accepted unless the alternatives at hand carry an even worse risk. Both subtotal thyroidectomy and chronic use of antithyroid drugs may be employed instead, if I^{131} and the problems and risks of these forms of treatment are well known. One must take into account one highly personal factor, the skill of the surgeon, if surgery is to be considered in planning for the care of the patient.

Carries Obligations

The author's present and tentative position is that any patient with Graves' disease above the age of 25 may be given I^{131} therapeutically, but that this form of therapy carries with it certain important solemn obligations. In the first place it is necessary that the physician fully acquaint the patient with the nature of the treatment and the possibility of complications, how they are recognized and how treated. Then it is necessary that the physician undertake a careful follow-up of the patient for the rest of the patient's life. Finally if the patient is referred back (to another or distant physician so that a personal follow-up is impractical), then it is essential that the patient's physician be fully informed of the events of I^{131} therapy and that he be requested to follow the patient with the same care and attention as the therapist would render.

Patients below the age of 25 should not be treated with I^{131} without compelling reasons. These can be treated with antithyroid drugs, and if this fails, by subtotal thyroidectomy. Patients who are unwilling to avoid pregnancy during the entire course of I^{131} therapy until normal health is restored should not be treated with radioiodine. Before treating a female patient the physician should be certain that she is not already pregnant.

These guide lines are those which govern the author at this time. They are flexible and subject to immediate change as new evidence and new experience accumulates. Finally they are only his own; each physician must decide for himself the weight of evidence and choose his therapy accordingly.

Summary

1. I^{131} therapy of thyrotoxicosis delivers a dose of radiation to the thyroid which is comparable to or which exceeds that which causes neoplastic changes in other tissues. Nevertheless, in spite of 22 years of experience, neoplastic changes in the thyroid attributed to I^{131} have not appeared in significant numbers. The same can be said for leukemia.

2. Theoretical considerations indicate that radioiodine therapy of thyrotoxicosis will impose a modest but real genetic burden on the population as a whole, and particularly, on the descendants of the treated patient. The list must be balanced against the risk of other forms of therapy for this disease.

3. I^{131} therapy causes no discernible effect on the parathyroids, the larynx, the kindney, the stom-

ach, or any other organ, other than the gonads and the thyroid.

4. Myxedema, occurring both early and late after radioiodine therapy, is emerging as the important undesirable consequence to radioiodine therapy. It is not a trivial complication. Patients who discontinue or neglect the treatment of myxedema in the older age group fall into a profound state of myxedema from which recovery may be impossible. The mortality in this group is high.

5. The author's present position is that all patients with Graves' disease above the age of 25 may be treated with I^{131}, but that this should only be done if a full and careful follow-up of the patient is possible for many years and strictly adhered to. If this is impossible, the physician should resort to chronic antithyroid drug therapy or subtotal thyroidectomy.

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THE BEST PAID MAN IN THE WORLD!

The physician is the best paid man in the world. He is required to have an education which will be a benefit and a comfort to him all the days of his life. He wins a degree and he attains the honorable title of doctor. He learns to know more intimately his fellow man than any one else can know his fellow. He gets praise for many things that he does not deserve and providence and diseases are blamed for his mistakes. He wins the gratitude of those he serves. His charity work is invaluable to his experience. If he is reasonably conscientious and works hard, he builds a practice that will insure him a good house, an office, and an automobile, and enable him to rear and to educate a family and to stand the losses of the inevitably foolish investments he makes. If he has taste for invention, there are innumerable unknown instruments and improvements awaiting him. If he wishes to discover, the laboratory unfolds opportunities for him. If he likes research, the facilities and the libraries are available. If he craves adventure, insidious dangers lurk around him, and there are ever pioneer fields to enter. In his endeavors his government, his community, and his fellow physicians stand ready to aid him. He is an advocate without a jury, a judge without a court, a minister without a surplice, a business man without guile, a farmer whose soil is the human body and whose crops are human health and happiness, and he is a laborer without a boss. The physician is the best paid man in the world!

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COMBINED AMITRIPTYLINE AND PERPHENAZINE IN COMBINED DEPRESSION AND ANXIETY

H. Lumpkin Coffee, M.D., *Forsyth*

■ ***A significant number of these patients were managed effectively on an outpatient basis.***

FEW SMALL TOWNS and rural areas have a psychiatrist. Patients with mental, emotional, or psychosomatic illnesses are perforce treated by the general practitioner or sent to a hospital. The advent of safe and effective psychotropic drugs, and the increasing spread of psychiatric knowledge among all physicians, has made it possible for the general practitioner to offer satisfactory if not optimal outpatient treatment to many persons who might otherwise require hospitalization.

Will Benefit

Tense, anxious patients usually will benefit from a tranquilizing drug and those who are apathetic or depressed will benefit from a mood-elevating analeptic agent. However, it is rare to find a patient with pure anxiety or pure depression; generally one symptom predominates and masks the presence of the other. There is, moreover, the risk that a tranquilizer will precipitate depressive reaction in a susceptible patient and, similarly, that an antidepressant will exacerbate mild or latent anxiety.

Coadministration

Coadministration of a tranquilizer and an antidepressant, in an appropriate proportion, provides a means of treating patients in whom anxiety and depression are obvious or suspected. A combination of amitriptyline and perphenazine recently became available for clinical trial. Each drug is widely used for respectively, depression[1, 2] and anxiety[3, 4] Their use in combination, which has been especially successful,[5-9] was further tested in patients with mixed syndromes as follows:

Fifty patients, 14 men and 36 women, ranging in age from 17 to 72 years, were treated for from one to 14 weeks for moderate to severe combined anxiety and depression.

The patients all had one or more of the following complaints: weakness, insomnia, nervousness, weeping, tremor, dizziness, free-floating anxiety, depression, and palpitation.

Five patients who were either pre-schizophrenic or schizophrenic were included in this series primarily because of the anti-psychotic action of perphenazine, but also in the hope that reducing the patients' anxiety and depression might help them to function without hospitalization. Four combinations of amitriptyline and perphenazine were made available to us (Table I).

The combination used was chosen after evaluating the relative amount and severity of a patient's anxiety or depression. Generally, one of the combinations with 25 mg. amitriptyline was given if depression was predominant and one of the combinations with four mg. perphenazine was given if anxiety was predominant. The usual starting dose was three tablets a day. Psychotropic agents used previously were discontinued at least a week before the trial; treatment with drugs required for organic disease was continued.

As each patient was started on the combination drug, results of differential blood count, urinalysis, and blood pressure were recorded. The blood count was repeated at the interim evaluation, and blood pressure was checked at each visit. The patient's response to the drug was evaluated at each visit after interview.

Patients who improved under therapy were continued on the combined preparation at the same or higher dosage levels. Treatment with the drug was discontinued in those who failed to improve after a reasonable period or who developed side effects that could only be eliminated by discontinuance. If mild side effects occurred, but the patient's mood had improved, treatment was continued at reduced dosage.

TABLE I

Perphenazine	*Amitriptyline*	*No. of patients receiving this combination*
4 mg.	10 mg.	25
2 mg.	25 mg.	3
4 mg.	25 mg.	15
2 mg.	10 mg.	7

TABLE III
Side Effects

Transient: Dosage Reduced		*Drug Discontinued*
Drowsiness	— 8 Patients	Increased Nervousness — 4 Patients
Dizziness	— 4 Patients	
Increased Nervousness	— 2 Patients	
Dry Mouth	— 1 Patient	
Total	— 15 Patients	

Results are summarized in Tables II and III. Results were sufficiently favorable in 37 patients who had been treated for from four to 14 weeks to warrant continued treatment with the combined preparation. Little or no relief was obtained in 13 patients treated for from one to seven weeks. One of the 13, a schizophrenic woman, was admitted to the state hospital.

Response was quite favorable in the patients with acute free-floating anxiety as the dominant symptom. In those patients, vague abdominal complaints, tension, insomnia, weeping spells, headache, and anxiety generally showed some diminution within a week after treatment was begun and were diminished considerably after two weeks.

The menopausal women, who were extremely nervous and depressed and complained of hot flashes, followed the same pattern: mild improvement after one week and marked improvement thereafter. Only two of our five schizophrenic patients responded well. Interestingly enough, these were the two patients whose schizophrenia was strongly tinged with anxiety.

Of the two women with cerebral arteriosclerosis, one, in whom consciousness was clouded, did poorly, but the other did well. This patient who did well had previously received electroshock therapy for severe depression, with good results, but had become depressed again. She had not responded to amitriptyline alone, but did well on the combined amitriptyline-perphenazine preparation. Since her depression and anxiety have been alleviated, she has spent much more time out of bed, in spite of the fact that initial dosage of the combined produced mild sleepiness. (This was relieved by reducing dosage).

It was possible to considerably reduce the dosage of narcotics required in seven patients with angina.

Differential blood counts were normal in all cases when treatment was begun and did not change significantly during treatment.

The amitriptyline-perphenazine combination seemed to have no effect on blood pressure. The hypertensive patients continued to show characteristically labile values, and the patient with cardiac diseases showed no changes.

Side effects observed in 19 patients (38%) disappeared in 15 on reduction of dosage (Table III). Treatment with the combination was discontinued in four patients with increased nervousness evidenced by jitteriness, nervousness, and tremors. One of these four patients had a mild conversion reaction, not due to the drug.

No extrapyramidal reactions were seen, even in patients on daily dosages of perphenazine as high as 16 mg. The absence of extrapyramidal reactions in these patients and those treated to date by other investigators,[6-9] suggests that amitriptyline protects against perphenazine-induced extrapyramidal reactions.

TABLE II
Indications and Results

			Extent of Relief		
Diagnosis	*Series*	*Dosage*	*Marked*	*Moderate*	*Little or None*
Anxiety Neurosis	5M, 18F 18-65 years	25-4	3	—	1
		25-2	2	—	—
		10-4	10	1	1
		10-2	4	—	1
Cerebral Arteriosclerosis	2F 62, 69 years	25-4	1	—	1
Hypertension and/or Heart Disease	4M, 5F 49-72 years	25-4	3	—	1
		10-4	1	—	3
		10-2	—	—	1
Menopausal Syndrome	5F 39-56 years	10-4	4	—	1
Schizophrenia and Pre-schizophrenia	2M, 3F 17-43 years	25-4	1	—	2
		10-4	1	—	1
Tension Headache	3M, 3F 48-55 years	25-4	1	1	—
		25-2	1	—	—
		10-4	2	—	—
		10-2	1	—	—
			35	2	13

The patient sample was probably too small to permit differential judgment about the effect of different dosage strengths. Nevertheless, it is our tentative impression that the combination of ten mg. of amitriptyline and four mg. perphenazine, three times a day, is suitable when anxiety is the main complaint, while 25 mg. of amitriptyline combined with four mg. of perphenazine* is useful when moderate or severe depression dominates.

Summary

Tablets containing 25 or ten mg. amitriptyline with four or two mg. perphenazine were given to 50 patients for one to 14 weeks, usually three times a day. In 45 patients with combined anxiety and depression, either alone or associated with cardiovascular disease (11 patients), tension headaches (six patients), or the menopausal syndrome (five patients), treatment was generally successful in 35 (78%) and generally unsuccessful in ten (22%). Of five patients with actual or incipient schizophrenia, two, in whom anxiety predominated, were improved considerably; three were unimproved. Side effects in 19 patients (38%) were mild and usually disappeared when dosage was reduced. Treatment was discontinued in four patients with increased nervousness. There were no extrapyramidal reactions.

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**Supplies of these combinations as Etrafon® Hydrochloride were kindly provided by W. Wesley Herndon, M.D., of the Schering Corporation, Bloomfield, New Jersey.*

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DANGER POINT FOR NEW DRUG RESEARCH

Public funds have permeated so many areas of research that we can already see quite clearly the outlines of the national problem that this invasion is creating. In my own field of health research, the U.S. Department of Health, Education, and Welfare has recently taken the position that scientific observations financed in whole or in part by the government through a University grant should fall into the public domain and generally remain there. They hold this despite the long, risky, and expensive process and the inordinately high proportion of scientific and technical skills needed to turn an observation into a genuine discovery and subsequently into a new and useful drug. The results of this policy as applied to National Institutes of Health research grants can be devastating unless the situation is modified. The fruitful relationship between university scientists and those in our industry, which has produced so many of the landmarks of modern medicine, can be cut by this policy as cleanly as if it had been done with a sharp knife. And the incentives to industry to transform promising scientific observations made in university laboratories into new medicines for the control or cure of disease can be reduced to a danger point. — Dr. Max Tishler, President, Merck Sharp & Dohme Research Laboratories, at Medal Dinner of Society of Chemical Industry, Houston, Texas, September 26, 1963.

AMA EMERGENCY IDENTIFICATION SYMBOL OFFERED

The AMA's new Emergency Medical Identification Symbol is now available as a coined medallion necklace. The entire reverse of the medallion is available for the engraving of important information for those who might require special aid in an emergency.

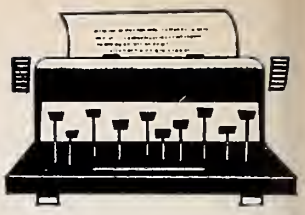
MEDIC-MEDAL is coined from solid nickel silver, and has a rhodium plated chain. An official AMA purse or billfold card accompanies each medal, to carry the patient's and physician's name and address, present medical problem, medicines, allergies and other important information.

A special prescription blank to assist the physician in prescribing proper identification is available in pad form gratis from the manufacturer, Wendell-Northwestern, Inc., 2424 East Franklin, Minneapolis, Minnesota 55406.

Physicians desiring an actual sample to show their patients will be mailed one prepaid for the special price of $1.50. MEDIC-MEDAL'S regular price is $3.00.

The AMA urges that every person should carry a card, such as the AMA emergency medical identification card, and that people with special health problems should also wear a durable signal device indicating their special need for medical care.

EDITORIALS



First — Do No Harm

STUDENTS of Robert F. Loeb well remember the "principles of therapeutics" propounded, with some pedagogic license, by this giant of American clinical medicine. The first of these, appropriately, admonishes the young physician, "First—do no harm."

As early as the 1930's it was apparent that otherwise useful medical therapy with Aminopyrine is fraught with dangers which may outweigh the potential good. Experience has moved us through untoward reaction of the early days of Sulfanomides and the chloromphenical problem to the tragic incidence of thalidomide-induced phocomelia.

Dr. John Stanbury, in an article appearing elsewhere in this Journal, calls attention to still another possible hazard . . . Iodine^{131} therapy of human thyrotoxicosis.

Writing with the authority of one of the world's outstanding students of thyroid disease, Dr. Stanbury attempts to bring into focus the genetic hazard involved. Theoretically Radioiodine therapy of all thyrotoxic patients would create 56 additional mutations per ten million births. Phrased another way, two out of every one thousand birth defects could be attributed to I^{131} therapy. While not overwhelming in volume, the idea of mutations of this order of magnitude gives pause to therapists.

While no significant cancer induction could be found by Dr. Stanbury, a theoretical problem exists. Beach and Dolphin, working with the United Kingdom Atomic Energy Authority calculate that up to 35 instances of thyroid cancer might occur per million persons exposed to as little as one rad of thyroid irradiation. The gross disparity between theoretical probability and observed incidence of neoplasm is comforting. Conceivably this comfort may fade with time.

Stanbury points out that hypothyroidism is a more frequent complication of I^{131} thyroid ablation than has been generally realized. An annual, cumulative, delayed appearance of hypothyroidism occurs in the range of about three per cent of cases treated. Earlier impression that this represents an error in calculation of dose is now considered erroneous.

Many clinicians are relying more and more on long-term drug therapy. However, VanderLaan and Storrie report leukopenia to occur in 0.44 per cent of patients treated with propylthiouracil and fever in 0.28 per cent. McGavak and Cherally report methimazole-induced leukopenia to occur in a fraction of one per cent of cases treated. Skin eruptions with these thioamides may occur in three to five per cent of cases.

There is no method of treating hyperthyroidism entirely free of risk. Local facilities and individual patient characteristics often dictate a specific form of management. It would be an unfortunate circumstance if Dr. Stanbury's provocative paper causes the physician to discontinue use of radioiodine. Iodine^{131} still has a very useful role to play in the therapy of thyrotoxicosis.

Whether thyrotoxicosis be treated with surgery, radiation or medication, care must be exercised. The onus of careful patient observation in the years following therapy clearly resides with the attending physician. This situation is not unique to the treatment of thyrotoxicosis. In treating any disease, we must "First—do no harm."

Roy A. Wiggins, Jr., M.D.

Welcome To Macon

IT'S TIME to get our calendars and mark off Sunday through Wednesday, May 3rd through 6th, 1964, as dates for the Annual Session of the MAG.

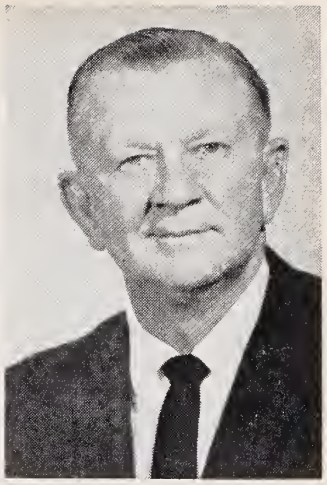
We, of the Bibb County Medical Society and Auxiliary welcome the privilege of being your host and hostess. A cordial welcome is extended for a visit to our city of Macon. The slogan of The Macon Greater Chamber of Commerce is "Macon on the move." MAG is also on the move so come and let's move together.

This marks the 110th anniversary of the occasion and we have promise of this being the best scientific and social program of any yet.

So get ready to start packing, come one, come all! Let's renew friendships, and work and then "Have a Ball!"

Sincerely,
Braswell Collins, M.D.
President, Bibb County
Medical Society, Macon, Georgia

PRESIDENT'S LETTER



GEORGE R. DILLINGER, M.D.

ANNUAL MEETING MACON - MARCH 1964

AGAIN IT IS TIME for the Annual Meeting of M.A.G. Time to recapitulate and see if your association is making progress. Are your officers doing the job you want done? Is your money being spent wisely and well? Are there other ways to help you to give better medical care to the people of Georgia? With our exploding population how can we educate and train enough Physicians, Dentists, Nurses, Pharmacists, Technicians and all the other paramedical personnel? All of these problems and many more, are of concern to your leaders.

Schools

Certainly we need another Dental College in Georgia. Most of Georgia Dentists are educated in other states. We certainly need another Medical School. We need many more schools of Nursing.

Where should these schools be located? Where is the money coming from?

What about Mental Health? Should we have a separate State Department of Mental Health? Or will our institutions for mental care continue to be a subservient small cog in the gigantic Department of Public Health.

Our heritage and freedom depend on whether we solve these problems in Georgia. If we go hat in hand to a paternal socialist bureaucracy in Washington to get the answers — our problems will never be solved to our satisfaction.

Politics both national and state have been most important. It always will and must be, if we are to carry on the traditions of medicine and give our best to our patients. The alternative is giving our best to a government bureau, in order to stay alive.

Macon in May

A new and changed schedule for our Annual Session. See your old friends and classmates; make new friends. Do your best to make MAG GO!

President, Medical Association of Georgia

CANCER TEACHING PROGRAMS FOR GEORGIA'S EDUCATIONAL TV STATIONS

J. H. Powell, Jr., M.D., *Newnan*

A SERIES OF CANCER teaching programs for Georgia's Educational TV station is being developed by the Georgia Division of the American Cancer Society.

The six half hour programs will be used as a part of the In-Service Teaching Training Program conducted by the State Department of Education, and are being planned by key volunteer leaders of the Society and officials of the State Department of Education.

Deficiency

This series is a development of a recently released study of 27 major health and biology text books now in common use in public schools throughout the United States that revealed a "quantitative" deficiency in the treatment of the subject of cancer.

Each of these texts was carefully examined for the amount of space, as measured by words, devoted to cancer related subject-matter. The major findings were: 1. All health and biology texts gave at least some attention to cancer; 2. Of the 19 health texts considered, 12 rated "good" to "excellent," but only seven of the 18 biology texts had correspondingly good ratings; 3. Only ten of the 19 health texts covered all ten of the sub-topics investigated and none of the 18 biology text-books covered all ten sub-topics; 4. Relatively few inaccuracies existed, and these tended to relate to somewhat outdated statistics.

Consideration

Cancer, as a major health problem in the United States—striking in approximately two out of every three American homes, seems certainly to merit particular consideration by students and, frequently through them, by adult Americans.

The school textbook constitutes the most important source of information on cancer for biology and health students supplemented by the individual teacher's background and knowledge of cancer.

This TV series is planned to provide the classroom teacher with accurate and up-to-date local background information on cancer — biologically, clinically, and as a sociological element of our environment.

Integrated Material

The sub-committee of the Earlier Treatment Education Committee of the Georgia Division that is working on this series, composed of representatives from the medical, educational and television fields, has planned carefully *not* to present the teacher with information to be used as a "block of classroom instructions," but material that can be integrated in biology and health classroom activities throughout the school year.

While it is true that the chances of a young person getting cancer are not great, it does develop in children. In 1962, cancer took the lives of 4,700 children in the United States under age 15. There were a total of 22,500 cancer deaths in the age bracket 15 through 44. Still, this is a relatively small portion of the estimated total of 280,000 annual cancer deaths.

Why then, should young people in our high schools know about cancer? Here are a few good reasons:

What they learn in the classroom may help save the life of some older member of the family.

Learning about cancer while still young will guide the person as he or she advances into the more cancer prone ages.

And, learning about cancer, the medical, scientific and educational fight to control it, may challenge more young people to select careers as scientists, physicians or medical technicians.

The American Cancer Society has continuously sought to increase public awareness of the hopeful side of cancer, to overcome fear and ignorance of the disease.

In particular—to emphasize that cancers can be cured, and that cures are steadily increasing as more and more people learn of the actions they can take for self-protection.

This knowledge, together with a fear-free attitude that encourages life-saving actions, often is most effectively instilled through high school studies.

35 Jefferson Street

Approved by the Professional Education Committee, Georgia Division ACS.

BACTERIAL ENDOCARDITIS: ITS EVOLUTION AND TREATMENT

Hurley D. Jones, M.D.
Edward R. Dorney, M.D., *Atlanta*

BACTERIAL ENDOCARDITIS is an old disease with a new look. This face lifting began 20 odd years ago when the introduction of antibiotic therapy changed the 100 per cent mortality rate to 65-70 per cent cure rate. Not only has the new look consisted of a decreased mortality rate, but also of a diminished incidence of the disease.[1] The clinical findings have changed so that the classically described picture of fever, murmur, splenomegaly, petechiae and peripheral embolization is seldom seen. Recent publications state that 60 per cent of patients had neither petechiae or splenomegaly and 20 per cent have had no anemia at the time of diagnosis.[2] Any patient presenting with a significant murmur and unremitting, unexplained fever of seven or more days duration should be suspect and have blood cultures drawn. Four or five cultures taken over a period of several hours, incubated aerobically-anaerobically for bacteria and fungi, will produce as many positive results as 20 or more drawn over a several day period.[3] After cultures have been obtained, therapy should be started prior to identification of the causative bacteria. In recent years, the frequency of negative cultures in proven bacterial endocarditis has risen to about 20 per cent. Therefore, under certain circumstances, treatment may justifiably be continued when cultures are negative.

Etiologic Organism

Prior to the introduction of penicillin and streptomycin, Streptococcus viridans was the etiological organism in the majority of cases. Today staphlococcal endocarditis is almost equally as prevalent[1] and occurs frequently in a resistant form. Enterococcal endocarditis has shown a similar tendency to increase frequency of occurrence and resistance to therapy. Staphlococcus albus, long considered an innocent contaminant, and various fungi are now recognized as etiologic factors, especially following cardiac surgery.[1-6] Gram negative bacilli are occasional etiologic agents and in addition Rickettsia have also been reported.

Treatment consists of eradication of the responsible organism by means of bacteriocidal drugs. Important in this regard is the employment of a serum bacteriocidal test[7] which can be performed in the manner described by Heilman. A bacteriocidal effect in a one to four dilution is satisfactory and gives the physician a foundation on which to base the dosage of any given drug.

Penicillin is the drug of choice in the treatment of endocarditis caused by Streptococcus viridans. The drug should be given parenterally, 10,000,000 units of penicillin IV and continued for a period of two to four weeks depending on resistance of the organism. In some resistant organisms the addition of Streptomycin, one gram q.d. intramuscularly, is also necessary. This combination in a dose of 25-40,000,000 units of penicillin by vein and one gram Streptomycin b.i.d. intramuscularly is likewise the best therapy available for enterococcal endocarditis, and should be continued for a full six weeks. If this is unsuccessful, Ristocetin 25-50 mg/kg daily given by the method of Romansky may be tried.[8] Sensitive staphlococci may be treated with penicillin G, 50,000,000 units each day plus one gram streptomycin intramuscularly b.i.d. for a period of six weeks. A sensitive organism is defined as one responsive to one unit of penicillin per milliliter. Penicillin G is more effective against the non-penicillinase producing staphlococci than Methicillin and Oxacillin. Methicillin in a dosage of two to four grams given intramuscularly every four hours for at least six weeks, or Vancomycin three grams each day intravenously for four weeks as described by Geraci, may be used for resistant staphlococcus. Pnuemococcal infection is best treated with penicillin. Bacterial endocarditis caused by Gram negative bacteria, although rare, seems to respond best to Kanamycin in doses of 0.5 grams intramuscularly every four hours for three to five weeks; toxicity has been a problem with this drug. Gonococcal infection responds well to penicillin. Amphotericin B is the preferred drug in fungal disease of the endocardium. Rickettsial endocarditis has been only recently reported and treatment has not been well delineated, although tetracycline should be the drug of choice.

The key to successful treatment of bacterial endocarditis is early diagnosis. The secret of early diagnosis is an ever present awareness of the disease. If the diagnosis can be made prior to irreparable valvular damage, mortality as well as morbidity can be lessened. The alert physician is in a position to accomplish each of these goals.

Emory University School of Medicine

(A complete bibliography may be obtained by writing to JMAG, 938 Peachtree Street, N.E., Atlanta, Ga. 30309.)

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

TALKING PROBLEMS

W. D. Stribling, III, M.D., *Gainesville*

THE STATISTICS quoted by Drs. Duval and Holland in the November edition of the MAG Journal are staggering. When one considers that an estimated 395,000 Georgians are now suffering from some form of mental illness with only 40 board-certified psychiatrists to care for them, it is apparent that all physicians in Georgia must assume an even more active role in this field. The internists, pediatricians, general practitioners, and other medical specialists are now playing a great role in treating these patients, but it is apparent that this role must increase. It is time for American medicine to play a greater part in the care of these patients or by default permit non-medically trained persons to assume this responsibility.

Time Has Come

The time has come for physicians to allot more time to treatment of emotionally ill patients. This means setting aside specific time for interviews and times specifically devoted to "talking problems." This time should be utilized to focus our attention upon the fact that these patients are people with human problems with which they have been unable to cope. Most physicians will be surprised how easily these patients can be helped to come to grips with these problems so as to avoid or improve neurotic or psychosomatic symptoms.

The physician who undertakes treatment of emotionally ill patients should utilize psychiatric principles in his work. He should have a strong understanding of himself, his limitations, his weaknesses, as well as his assets. The mere understanding that a physician is interested in the patient's problem, as demonstrated by his willingness to listen, is often in itself therapeutic. The value of the sympathetic ear can never be underestimated.

Decompensated

One of the greatest problems faced by the non-psychiatrist is that of the psychotic or emotionally disturbed patient who is completely decompensated. The shortage of private and public psychiatric beds is well known. Certainly psychiatric beds should be placed in all of our new community hospitals and added to the old ones as rapidly as possible. Our mentally ill patients should be removed from the jails and placed in the hospitals where they belong.

The value of short-term hospitalization by the family physician or specialist cannot be over emphasized. It is encouraging to note that progress is being made with the insurance companies in recognizing the occasional necessity for this type of treatment. Removing the patient from environmental stresses and placing him in a community hospital where he may receive daily psychotherapy by the family physician or specialist is a very effective way of preventing a complete mental breakdown with subsequent psychiatric hospitalization.

It is hoped that we physicians will realize even more the responsibility not only for the physical well-being of our patients but for their emotional well-being as well. I am sure that the physicians of Georgia will rise and accept this great challenge.

1114 Vine Street

Editor's Note: Dr. Stribling is an internist in Gainesville, Georgia, and is also a member of the MAG Sub-committee on Mental Health.

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

PATHOLOGISTS TO HOLD APRIL MEETING IN ATLANTA

The annual joint meeting of the Atlanta Society of Pathologists and the Gulf Region of the College of American Pathologists will be held in Atlanta on April 25-26. The meeting on the 25th will be held at the United States Communicable Disease Center and will consist of a seminar in Clinical Chemistry, with emphasis on transaminase and cholesterol determinations and spectrophometry. On Sunday, the 26th, there will be a slide seminar on Pathology of the Spleen and Lymph Nodes, given in the Emory University Hospital Auditorium, by Dr. Henry Rappaport, Professor of Oncology of The Chicago Medical School. Slide sets and protocols may be obtained from Dr. Charles B. Waldron, 106 Forrest Avenue, N.E., Atlanta, Georgia.

DEATHS

WILLIAM C. DABNEY, 84, who practiced medicine in Atlanta for 40 years, died January 14, 1964, in a private hospital in Ocean Springs, Mississippi.

He was a graduate of the University of Virginia Medical School and had been Chief Surgeon with the Tennessee Coal and Iron Co. in Birmingham, and Surgeon Consultant at Keesler Air Force Base, Biloxi, Mississippi.

He is survived by his widow, the former Julia Jones; sisters, Mrs. James Latane, California, and Mrs. Stuart Broadnax, Virginia; a brother, B. G. Dabney, Plant City, Fla.; a son, William C. Dabney, Jr., California; six grandchildren and one great-grandchild.

B. B. BARMORE, JR., 35-year-old pediatrician of Thomaston, died January 15, 1964, of a heart attack. He was stricken while on duty at the Upson County Hospital.

Dr. Barmore came to Thomaston two years ago to specialize in pediatrics. He had served two years in residency in pediatrics at the Eugene Talmadge Memorial Hospital in Augusta.

He did his pre-med work at Mercer University and received his medical degree from the Medical College of Georgia. Following his medical education, Dr. Barmore served three years in the U. S. Air Force being discharged with the rank of captain.

In Thomaston, Dr. Barmore had been active in civic and church life. He was a member of the First Methodist Church and served on its official board. He was a member of the Thomaston Kiwanis Club and of the Upson County Medical Society.

Survivors include his wife, Mrs. Barbara Bonnette Barmore; one daughter, Bonnie Barmore; three sons, B. B. Barmore, III, Benjamin B. Barmore and Brian B. Barmore, all of Thomaston; his mother, Mrs. B. B. Barmore, Sr. of Dublin and one brother, W. W. Barmore, Ft. Dix, N.J.

SOCIETIES

W. C. Sams, Jr., has been elected president of the BEN HILL-IRWIN MEDICAL SOCIETY. He succeeds George Mixon, also of Ocilla, to the post. J. E. Smith of Fitzgerald, was elected Secretary-Treasurer of the society and Ralph Roberts and Roy Johnson were named delegates to the Medical Association of Georgia.

The CHATTAHOOCHEE MEDICAL SOCIETY adopted a resolution at its annual meeting recently honoring the late Webster Pierce Ezzard of Lawrenceville. Dr. Ezzard died on January 29, 1963, since the last annual meeting of the medical society. The resolution commended Dr. Ezzard for his devotion and contribution to the community. The resolution will become a permanent part of the minutes of the medical society and a copy was sent to the local newspaper and the Medical Association of Georgia.

Jason Meadors has been elected President of the COLQUITT COUNTY MEDICAL SOCIETY. Serving with Dr. Meadors in 1964 will be James Flynn, Vice-President, and Walter Harrison, Secretary-Treasurer.

OCONEE VALLEY MEDICAL SOCIETY has elected the following officers for 1964: Lee Parker, Greensboro, President; Kendrick Lewis, Madison, Vice-President; and H. A. Thornton, Greensboro, Secretary-Treasurer. George Green, Sparta, was elected Delegate to MAG, and C. H. Dickens of Madison was elected Alternate Delegate.

Newly elected officers of the SOUTH GEORGIA MEDICAL SOCIETY are T. H. Smith, Jr., President; Quentin Lawson, Vice-President; B. S. Davis, Secretary-Treasurer; S. H. Story, MAG Delegate; R. L. Stump, Alternate Delegate; and Van Bennett, Board of Censors.

At the winter meeting of the SIXTH DISTRICT MEDICAL SOCIETY held in Macon, December 4, the following new officers were elected to serve for 1964; President—Hugh K. Sealy, Macon; Vice-President—Ned Davis, Irwinton; and Secretary-Treasurer—W. A. Bootle, Macon. A scientific program preceded the business meeting. Four Macon doctors were the first speakers. Arthur Butterfield, spoke on "Review of Twin Pregnancies at the Macon Hospital During the Past Five Years;" Charles Magnan spoke on "Augmentation Mammaplasty;" A. M. Phillips, Jr. spoke on "Some Common Causes of Neck and Shoulder Pain;" Edward L. Stevens spoke on "The Primary Surgical Closure of Mastoid Cavities;" and Frank Cronic spoke on "Pulmonary Vasculature." Atlanta doctors Lawrance K. Altman and B. R. Gendel spoke on "Botulism," and "Cytogenetics," respectively.

PERSONALS

First District

WILLIAM W. OSBORNE, Savannah, was recently elected as President of the Physicians' Service Association of Savannah, Inc. He succeeds L. M. FREEDMAN, who was President of the association for five years. Also elected were JOHN L. ELLIOTT, Vice-President, and R. O. BOWDEN, WALTER E. BROWN and Dr. Elliott were reelected to the Board of Directors. PETER L. SCARDINO was named a new member of the board for a three-year term.

"Surprises Found in Coronary Study," was the topic of the talk presented by CURTIS G. HAMES, Claxton, when he spoke to the Georgia Medical Society at Savannah, January 14. Dr. Hames has just recently received a ten year grant from the National Institute of Health to study heart disease in Evans County.

Dr. and Mrs. WILLIAM G. SIMMONS, Sylvania, spent the first week in January at Miami Beach, Florida, attending a postgraduate seminar in anesthesiology. Dr. Simmons returned to his office January 14.

Second District

Blakely physician, JACK G. STANDIFER, was recently presented a certificate for 15 years service to the Early County Selective Service Board.

JAMES P. TAYLOR, Thomasville, has announced the transfer of his OB-GYN practice to the Secrest Building.

JAMES W. REID, SR., Thomasville, recently ended his long career as county medical officer. Dr. Reid has served for 41 years as County Physician for Thomas County. Although he is ending his career as county medical officer, he will continue his private practice.

Third District

FRANK A. WILSON, III, of Leslie, attended a postgraduate course on heart disease, in January, at the Medical College of Georgia, Augusta. Dr. Wilson was one of 38 practicing physicians from Georgia and adjacent states participating in the sessions.

FRANKLIN D. EDWARDS takes pleasure in announcing that JAMES HOWELL SULLIVAN is now associated with him in the practice of urology at 1430 Third Avenue, Columbus.

Fourth District

IRA H. SLADE, JR., Griffin, was the guest speaker at a January luncheon meeting held by the Woman's Auxiliary to the Spalding County Medical Society. Dr. Slade's subject was, "The Importance of the Doctor's Wife to the Medical Profession." He enumerated various ways in which a wife may help or hinder her husband professionally.

Fifth District

JOHN E. STEINHAUS, Atlanta, presented a paper on "Problems in the Choice of Sedatives and Analgesic Drugs," before the Michigan Association of General Practitioners in Detroit, November 13.

Attending the convention of the Southern Medical Association held in New Orleans November 21-22, were CLAUDE A. TAYLOR and ZENJI TANAKA, Atlanta, who presented a paper entitled, "General Anesthesia for Bronchoscopy."

Named as volunteer medical representatives for the DeKalb County Medical and Nursing Unit of the Metropolitan Atlanta Red Cross Disaster Committee are H. DUANE BLAIR, Decatur, and DONALD W. RAIRIGH, Atlanta. Atlantan, MARVIN A. MITCHELL, is Chairman of the Red Cross medical subcommittee.

An artificial defibrillating machine for correcting abnormal heart beats has been given to Emory University Hospital in memory of the late LON GROVE, Atlanta, by his friends. At the time of his death last October, Dr. Grove was clinical Associate Professor Emeritus of Surgery at Emory University Medical School and retired Chief of Surgical Services at Henrietta Egleston Hospital for Children.

WARREN B. MATHEWS and WEBSTER A. SHERRER have been named volunteer medical representatives for the Cobb County Medical and Nursing Unit of the Metropolitan Atlanta Red Cross Disaster Committee.

Sixth District

EMORY G. NEWSOME, Sandersville, has been elected President of the Medical Staff of Memorial Hospital of Washington County. Serving with the new chief of staff during 1964 will be DEAN S. HOLMES, Vice President, and LOUIS R. HARVEY, Secretary. The three doctors will comprise the executive committee of the medical staff.

Seventh District

N. H. HUTCHISON of Trenton has been elected Chief of the Medical Staff of John L. Hutcheson Memorial Tri-County Hospital. He succeeds THOMAS E. ADKINS. Serving with Dr. Hutchison are JEROME P. SIMS, Vice Chief of Staff; WARREN TERRELL, Secretary; GEORGE E. BECKMANN, JR., Chief of Surgical Services; G. E. KINARD, Chief of General Practice; ROY POPE, JR., Chief of Medical Services; and W. D. CRAWLEY, Chief of Obstetrical and Gynecological services.

CHARLES T. HENDERSON, Marietta, has been elected President of the Cobb County Medical Society. He succeeds NOAH MEADOWS. ROBERT MAINOR of Smyrna was elected Vice-President and the new Secretary is ED VAUGHN, Marietta.

Eighth District

Waycross physician, W. L. POMEROY, suffered an acute coronary occlusion on January 18. Dr. Pomeroy is now recovering satisfactorily.

On January 16, W. L. FLESCH, Waycross, spoke to the Ware County Medical Assistants Association at their installation banquet. The importance of the medical assistant to her employee was the subject of his presentation. ROBERT C. SMITH and FLOYD DAVIS serve the organization as medical advisors.

Ninth District

GEORGE I. EZZARD and HARRY H. HUTCHINS have been named volunteer medical representatives for the Gwinnett County Medical and Nursing Unit of the Metropolitan Atlanta Red Cross Disaster Committee.

C. B. SKELTON and RICHARD F. GRAVES, Winder, announced the first of January that WILLIAM HOLMES will be their associate in the practice of medicine. Dr. Holmes comes to Winder from Athens.

Tenth District

Hartwell's newest physician, TERRELL B. TANNER, has opened his office at the Big H Shopping Center for general medical practice and eye examination.

TOM W. GOODWIN, Augusta, spoke in December to the Augusta Insurance Underwriters.

Warren A. Candler Hospital, Savannah, has elected a new staff to serve for the coming year. WILLIAM H. LIPPITT will serve as Chief of Staff; JOHN KIRK TRAIN as Chief of Staff-elect; J. R. WINBURN as Secretary and CHARLIE SAX as Treasurer.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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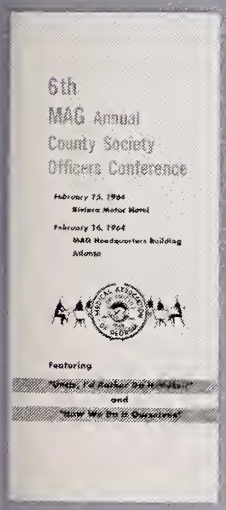

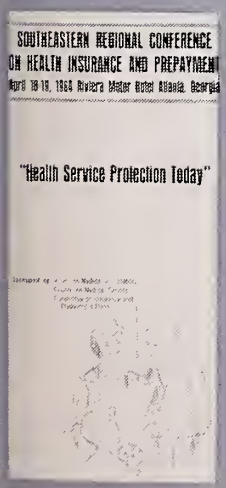

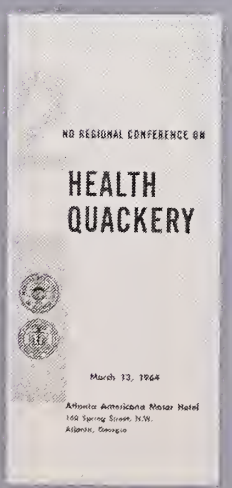

MAG ACTIVITIES ON UPSWING

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State & National Legislation

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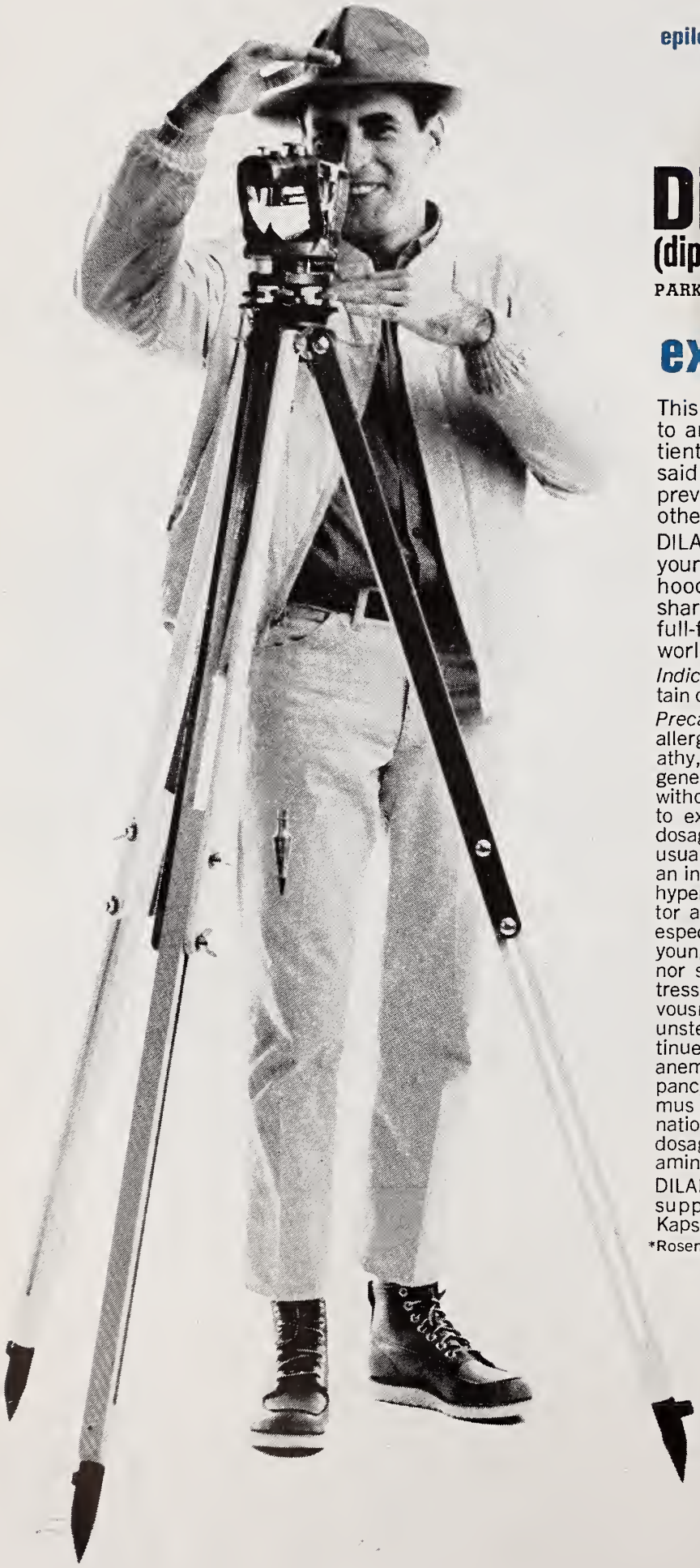

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*Roseman, E.: *Neurology* **11**:912, 1961. 33664

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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

NON-PENETRATING ABDOMINAL TRAUMA

Robert W. Buxton, M.D., *Baltimore, Maryland*

■ ***Patients are described in whom obvious trauma occurred, but at operation, the injury suspected did not exist.***

THE MOST IMPORTANT factor in the etiology of serious and possibly lethal non-penetrating abdominal trauma is the apparent trivialness of some trauma which results in severely incapacitating symptoms, hemorrhage, or death. This is most strikingly apparent in the patient with multiple injuries wherein the abdominal injury is largely overshadowed, through a paucity of early symptoms by other injury which produces shockingly severe pain.

Injured Organs

Any intra-abdominal structure may be damaged by blunt trauma, and damage of all has been reported. However, some structures are rarely damaged no matter how severe or bizarre the injury; it is well to remember that the fixed, parenchymatous structures, the spleen, liver and kidneys are the usually injured organs.

Through tradition, it is customary to say that, "In evaluating the injured, no diagnostic aid can supplant and none is as rewarding as an accurate history and repeated, thorough physical examinations." This is a statement made in retrospect and simply ignores the majority of victims from auto accidents who rarely give a coherent, reliable history of much except certain subsequent events. On the other hand, repeated, careful examination may be the only available life-saving measure.

It has become traditional, too, to deprecate certain diagnostic maneuvers and much laboratory data that can sometimes be obtained from these patients within a surprisingly short period of time.

It is not the purpose of this magazine to deal with the usual patient with non-penetrating abdominal injury but, rather, to discuss some of these patients to whom obvious trauma occurred, and the proper diagnostic measures were accomplished, but at operation the injury suspected did not exist!

Presented at the 109th Annual Session of the Medical Association of Georgia, May 7, 1963, Jekyll Island, Georgia.

1. The treatment for ruptured spleen is splenectomy. The mortality rate without operation has been estimated between 75 and 100 per cent and is usually placed at 90 per cent. When the spleen alone is injured "the mortality should probably be under two per cent and is due usually to delay in diagnosis or operative treatment." It is obvious that every effort must be made to diagnose splenic rupture and to correct this by prompt splenectomy.

The chief diagnostic signs of splenic injury are: local pain in the left upper quadrant associated with a history of trauma, fracture of lower ribs on the left side, shoulder pain, signs of blood in the abdomen (pain, ileus, distention, rigidity), and evidence of blood loss that is large and progressive. Roentgenographically there is usually elevation of the left diaphragm, increased density in the left upper quadrant and displacement of the stomach toward the right with crenation of the greater curvature of the stomach.

Diagnosis Not Difficult

Diagnosis of splenic injury is not difficult, when all or most of the above evidences are present. On the other hand, a great number of patients will show a latent period, between injury and the time of rapid bleeding into the peritoneal cavity, during which, to all appearances, there is no hemorrhage from the spleen; or when the rate of bleeding is such that compensation for a reduced circulating volume can be maintained for many hours. It is with this latter group of patients that some interest may be aroused, for it is here that operation may be undertaken with the least patient risk.

On September 25, 1962, a Negro woman of 18 years (BD. #25-91-48) was seen in the University of Maryland accident room. She had jumped from a moving auto and was taken, unconscious, into a nearby hospital. The period of unconsciousness lasted 20 minutes. There was a bruise over the left

occiput and blood in the left ear canal. Patient was transferred the following morning to the University Hospital where there was noted, in addition, tenderness in the left upper abdomen, a possible mass in the left blank. Bowel sounds were active. The hemoglobin was 10.5 gms., WBC 14,000 and the urine was negative. X-ray of chest and abdomen were normal.

Paracentesis in the left lower abdominal quadrant yielded five ml. of blood. Operation showed a normal spleen; there was a small hematoma surrounding an omental vein. No other abnormality was noted within the abdomen.

Abdominal Paracentesis

Much has been written of the usefulness, the technics, the accuracy, of abdominal paracentesis in the early diagnosis of intra-abdominal disease. It is usually estimated that diagnostic abdominal paracentesis is accurate in 85 per cent of instances. Few, if any, record the likelihood or instances in which punctures of artery or vein within the peritoneal cavity have occurred. The above case report is such an instance and resulted in operation from which the patient did not benefit.

In another patient, not subjected to trauma, needle puncture resulted in a laceration of a major branch of the middle colic artery and this resulted in massive hemoperitoneum and contributed ultimately to the death of the patient. It is assumed that this can happen only when the artery is torn in the course of its puncture and rarely when simple penetration with a small calibre needle has occurred.

It must be realized, then, that from abdominal paracentesis much may be learned, but that this measure must be accomplished with the following admonitions:

1) The aspirating needle must be directed toward the lateral gutter.

2) Blood freely shed into the cavity and so aspirated does not clot or shows minimal clotting.

3) Blood which remains within the peritoneal cavity several hours show crenation of red cells—these can be detected on the unstained smear.

4) Abdominal paracentesis may be repeated at intervals and in several abdominal quadrants.

In each instance in which aspiration has been at fault in our experience these admonitions have not been honored.

2. More commonly abdominal paracentesis is of great help and importance to the injured patient:

C.J.K. (#19-09-54) a 29-year-old intoxicated white man was admitted one and one-half hours after an automobile injury. He complained only of anterior chest pain. He was conscious. Examination showed only right upper quadrant tenderness and some rebound tenderness. Bowel sounds were present. All X-rays were negative. Blood pressure 130/85, pluse 92, respirations 20, temperature 100. Nine hours after admission bowel sounds had disappeared, tenderness was generalized with guarding throughout.

Hgb. 15.6 gms. Hct. 108, WBC 14,950, serum amylase 277 s.u. Peritoneal fluid amylase 7,280 units; peritoneal fluid NH_3 1.64 gamma/ml. without WBC or organisms.

A diagnosis of traumatic pancreatitis was made and at operation there was a laceration of the head of the pancreas with a large hematoma and a few areas of fat necrosis about it. The laceration was closed and the area drained.

The patient was discharged well on his tenth postoperative day.

The value of a fruitful abdominal tap in a patient suspected of having intraperitoneal injury is great. In such patients with gross intraperitoneal bleeding, the need for exploration is obvious so long as the above described admonitions are observed. Significant and sometimes dramatic additional information may be gained. In a series of studies by Mansberger, the amylase content of peritoneal fluid was elevated in patients with perforations of the intestinal tract and those with gangrenous or infarcted gut, as well as the patient with pancreatitis. In patients with perforated, strangulated or lacerated intestine, ammonia elevations in peritoneal fluid were always above 3.0 micrograms/ml. In none of the patients with pancreatitis was the ammonia level above this figure.

Sufficient Injury

The patient just described had an injury sufficient to produce intra-abdominal damage. His physical signs developed slowly but supported this impression. His blood studies did not suggest blood loss and his free peritoneal fluid contained no blood (but did show an elevated amylase (7000 + units) and a NH_3 of 1.64 gamma/ml. Therefore, the diagnosis was traumatic pancreatitis and so proved at operation.

3. A the beginning of World War II it was a generally accepted concept that the length of time lag had an important influence on the case fatality rate in abdominal injuries. This seemed a reasonable concept. It was predicated not only upon observations from previous war injuries but also upon observations of civilian patients. Massive bleeding, peritoneal contamination, foreign materials in the cavity after open wounding all combined to produce dis-

turbances in cardiorespiratory and gastrointestinal physiology, and these combined to produce or enhance the state of shock following injury. The longer these persisted uncorrected, the more severe were the effects upon the individual, and, presumably, the graver was the prognosis.

An Analysis

Following World War II an analysis of abdominal wounds furnished little support for this concept. All through this war every effort was made to shorten the time lag between wounding, hospitalization and operation. It was disconcerting then to find that these efforts had no influence of large importance upon prognosis. Of considerably greater importance was the severity of wounding, when wounds of the same viscus were compared in respect to extent, degree of hemorrhage, and the amount of peritoneal contamination. However, this type of analysis did not lend itself well to statistical evaluation. A practical solution came with comparison of severity in terms of the number of visceral injuries each casualty had sustained. When this was done, it became clear at once that whether or not patients who had sustained the greatest number of visceral injuries were to live or die did indeed depend in large measure upon the time elapsed between wounding and the institution of surgical care.

It is rarely possible in a civilian practice to accumulate a series of patients with multiple visceral injuries to equal those compiled in a given war theater; nor is it possible to compile such a group of patients in a single short period of time wherein the technics and supportive measures used are as uniform and the patients' age grouping and physical fitness as nearly comparable as in an area of active warfare. Nonetheless, the lesions seen in a civilian hospital may offer many of the same problems.

J.J. (26-33-17) was a 64-year-old white man admitted at 10 a.m., one hour after being severely compressed between a steel crane and a steel pile. Patient was not unconscious but could not work because of nausea and shortness of breath, and was brought to the University Hospital emergency room.

His blood pressure was 70/30, pulse 88, respirations 20, Hgb. 15 gms., Hct. 44.5; WBC 12,650. The abdomen showed a small contusion on the right costal margin and was diffusely tender in the upper quadrants, but maximumly tender on the right. Abdominal paracentesis was negative.

One hour later the abdomen was board-like and there was increasing abdominal pain.

The patient was taken to the operation room four hours after admission and five hours after injury with a diagnosis of ruptured liver. Upon opening the abdomen a large amount of free blood was present. When this was evacuated a lacerated spleen was noted and splenectomy was done. Blood continued to collect within the abdomen. A further search revealed two lacerations in the superior mesenteric vein. These were closed with arterial sutures. Upon further examination, the duodenum was noted to have been transected through three fourths of its circumference in this third part. This was closed in two layers. The area was drained and the abdomen closed. The patient was discharged well on his 32nd postoperative day.

This patient seems to epitomize a frequently seen entity; this was an individual who had a potentially severe injury, who remained at work for one hour, was admitted in severe hypotension but with minimal additional evidences of severe injury, and who, when increasing need was seen for operation, still failed to localize his injury. Moreover, at operation three potentially lethal injuries were present but not readily apparent.

Difficult to Ascertain

It is difficult to ascertain the possible lethal potential of injuries to the superior mesenteric vein in terms of prior experiences. Much attention has been paid to injuries to major venous channels with the abdomen such as the vena cava, the portal and hepatic veins. It is apparent that failure to repair or to litigate vessels of this or similar size will result most often in death and rarely or occasionally in a false aneurysm or arterio-venous fistula.

A similar type of injury is the following:

C.H.K., a 63-year-old white man was admitted to the Maryland General Hospital four hours following an automobile accident. Upon examination he had a 15 cm. laceration of the forehead, laceration of the shoulder, a closed fracture of the right femur and a distended, silent, slightly tender abdomen. Hbg. 10.6 gms; WBC 26,000; serum amylase 190

Figure 1
Laceration Mid-Colic Artery after blunt abdominal trauma.

units. A peritoneal tap yielded free blood, and a diagnosis of rupture spleen was made.

At operation there was an extensive hematoma in the transverse mesocolon plus 2,000 ml. of free blood in the cavity. The transverse colon was pale. The middle colic artery had been severed. The transverse colon was resected. (Figure 1)

The patient made an uncomplicated recovery.

The majority of reports of blunt, non-penetrating injuries to mesenteric vessels relate tears or avulsions to the mesentery. These are usually accompanied by a high mortality because most commonly they are seen as a part of multiple organ injuries. Such wounds are usually closer to the free margin than to the root of the mesentery and the injury is most often of both artery and vein. The clinical picture is that of hemorrhage and abdominal pain and the cause of death is usually blood loss and the attendant shock. Since these are smaller vessels, it seems likely that survival for a longer period could be expected than in the instances of superior mesenteric vein and middle colic artery injuries as described in the above cases. Several instances are recorded where operation was undertaken because of beginning peritonitis from infarcted or gangrenous intestine and not because of known continued blood loss.

In each of these patients abdominal tenderness, along with positive needle paracentesis, has been the indication for operation. Abdominal tenderness is not usually considered an indication for operation. Perhaps it should be when the patient has been the subject of an abdominal injury.

Blood

It is customary to give patients who are in shock large quantities of blood and to attempt to attain a normal or near normal blood pressure before taking them to the operation room. As in patients with massively bleeding peptic ulcers and ruptured aortic aneurysms, the best way to combat shock is to stop the bleeding. This frequently requires an aggressive approach under less than ideal conditions and sometimes before the patient's shed blood has been fully replaced.

4. Extravasation of blood in the posterior trunk, behind the peritoneum, is seldom an indication for operation, and, as an unnecessary operation after trauma in which there have been multiple injuries, might be expected to carry an increased hazard to the patient.

W.F. (08-29-36) a 63-year-old Negro man, was admitted shortly after being struck by an automobile. He was unconscious for a short time. Blood pressure was 90/70 upon admission. He had a compound fracture of the left tibial plateau and a closed right tibial fracture. The compound fracture wound was repaired in the emergency room, the left leg was casted and the right leg splinted.

Following admission blood pressure fell to 65/0. Supportive measures included 4500 ml. whole blood and vaso-pressor agents. Because of slight bleeding from the urethra a catheter was inserted into the bladder. The urine was grossly bloody. Over the first 15 hours after admission, a progressively enlarging suprapubic mass was noted. By the time the mass reached the level of the umbilicus it was recognized that this was not a distending bladder. During this period of resuscitation the patient complained of severe low back pain.

X-rays revealed a pear-shaped bladder displaced markedly to the right and with irregularity of its border.

At Operation

At operation a large paravesicle hematoma was found and beneath this a five cm. laceration of the common iliac vein. The vein was ligated. No fractures of the bony pelvis were noted at operation and none was seen on the preoperative and subsequent roentgenograms of the pelvis.

In general a retroperitoneal hematoma should not be explored or disturbed except in the presence of an increasing mass, often with continuing or recurring shock in spite of transfusions. This patient is such an example. Customarily such injuries are associated with skeletal injury and vascular damage results from the exaggerated range of motion allowed by the lack of bony fixation or from impingement of a bony fragment directly upon the vessel. We were unable to define such an etiology in the above patient.

The diagnosis of closed abdominal injury must be considered in all patients who give a history of a blow on the abdomen, particularly if it is followed by abdominal pain and vomiting, and examination shows abrasions or contusions of the abdominal wall.

One of the most difficult surgical problems can be the patient suspected of having an abdominal injury which requires operation without the surgeon being able to define this need clearly or the precise organ injured. Williams and Zollinger have indicated in their study of 273 abdominal injuries that two out of five of their patients had serious associated extra-abdominal injuries and that these often masked or detracted greatly from the symptoms of the intra-abdominal lesion. These associated injuries have often delayed the detection and appropriate treatment of the abdominal injury seriously.

Of equally serious import is the frequency with which abdominal injuries are multiple. As has been

so clearly described by Wolff, et al. in their analysis of World War II injuries in the Mediterranean Theater, the case fatality is influenced remarkably by the number of organs injured, and in this instance there is little difference between the civilian patient and the wounded soldier. Two-thirds of the civilian deaths following abdominal trauma and reported by Williams and Zollinger occurred in patients with multiple injuries.

Aside from abdominal pain or tenderness, the absence of bowel sounds is a most important single physical finding since it may precede a rising pulse rate or a falling blood pressure except where a major blood vessel has been opened.

One of the most important ancillary diagnostic aids has been abdominal paracentesis. A single negative aspiration is not of great significance and when correlated with other findings may often be disregarded. A positive aspirate is of great significance but again must be closely evaluated. It is incorrect to state that such a diagnostic procedure is without hazard to the patient. Most discussions of this procedure have evolved about the hazard of passing needles into the intestinal lumen, particularly into a distended, obstructed loop of intestine. This is generally believed to be without hazard. When the technic is used incorrectly and a major splanchnic vessel is entered, misinformation may be obtained and serious damage done to the impaled vessel. Only careful attention to the technic used will avoid this.

Once paracentesis has been done and has yielded fluid, this must be examined critically and to its fullest, for thereby a correct preoperative diagnosis may be arrived at and the necessity and urgency of operative treatment determined.

Most of the cliches which in medicine are handed down from generation to generation have some merit. As in the instance of retroperitoneal hemorrhage or hematoma, prior experiences have confirmed the observation that exploration and evacuation of most of these is unnecessary and hazardous. This "hands off" speculation may, however, be to the patient's detriment, and repeated critical evaluation of the patient must be undertaken before the thought of surgical intervention is finally abandoned.

Summary

1) The value of abdominal paracentesis in the patient with non-penetrating abdominal trauma is great. The technic is not without hazard to the patient. The aspirate must be studied critically and completely—under such scrutiny the importance of this information may be such as to determine operation.

2) A considerable number of patients seen following trauma have suffered multiple injuries, and the time between injury and definitive repair may be critical in these individuals.

3) Massive, continued bleeding requires surgical exploration and correction regardless of whether this bleeding is intraperitoneal or extra (retro)peritoneal in location.

University of Maryland
School of Medicine

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DR. HARER ON FEES VERSUS QUALITY OF MEDICAL CARE

Doctors who fail to "educate patients in the economics of health and disease" must bear part of the blame for resentment against allegedly high medical fees, declares the president of the Pennsylvania Medical Society.

Addressing the American Association of Medical Clinics in Chicago, Dr. W. Benson Harer advises physicians to "preach the economic value of preventive medicine even more than the medical value. Preventive medicine will be the backbone of scientific medicine of the future."

He notes that few patients equate good health with economic well-being. "Only after disaster has struck do most people reach full understanding of the role health plays in economic life. Then, all too frequently, the disruptive effects of poor health cannot be avoided and payment of the doctor's bill becomes difficult or impossible."

METRONIDAZOLE FOR THE TREATMENT OF TRICHOMONIASIS

Edwin C. Junck, M.D.
Hernan Dominguez, M.D.
Sanford Richman, M.D., *Augusta*

■ ***Eighty-nine per cent of the patients treated orally showed no recurrence of infection.***

TRICHOMONAS VAGINALIS VAGINITIS has long been a source of irritation to both patient and physician. In 30 to 40 per cent of the patients recurrence inevitably took place. Investigators could never claim a better than 60-70 per cent temporary cure rate with various local medicaments. It has been only with the advent of metronidazole that new hope has been afforded for the chronically infected patients.

Cardinal Symptoms

Leukorrhea, soreness, burning and often pruritus are the cardinal symptoms of the vaginitis produced by Trichomonas vaginalis. This flagellated protozoan is an inhabitant of the vagina, urethra and prostate, which was described originally by Donné in 1836; it is probably the most common cause of vaginitis in general and is manifested by an inflammatory, suppurative reaction of the vagina. When the infection reaches its height, a reddish "strawberry-like" vaginal mucosa is the main manifestation.

Trichomonas vaginalis has an oval shape (Figure 1) and is about the same size (30 microns in length and 10-15 microns in diameter) as the leukocyte with which it sometimes may be confused by the inexpert observer. The differentiation is based on the active movements of the trichomonads in fresh preparations and the presence of flagellae.

It is routine in our department to take a sample from the vaginal fornix of each patient examined and to observe it under the microscope. The most satisfactory method in obtaining the specimen is as follows: insert an unlubricated speculum into the vagina, then introduce a cotton-tipped applicator deeply until the fornix is reached, make rotary movements with the applicator, remove it and submerge in a test tube containing 1.0 cc. of isotonic saline (0.9 per cent) and mix gently. Place a drop of this preparation on a clean slide and observe under the microscope. In order to obtain the best results, the diaphragm of the microscope should be closed, allowing only a small beam of light to pass through. With a low magnification objective the preparation is examined for the presence of monilia and trichomonads; the former being readily recognized by their characteristic shape and the latter by their motility and under high dry objective by their flagellae. With this simple procedure, a definitive diagnosis can be established and specific treatment started on the initial visit.

Many different treatments have been advocated for Trichomonas vaginalis vaginitis (Vagisec, aminitrozole, glycobiarsol, Tricofuron, Floraquin, Vioform, Nylmerate, triple sulfa vaginal cream. Milibis suppositories, mycostatin, betadinegel, etc.) but the first

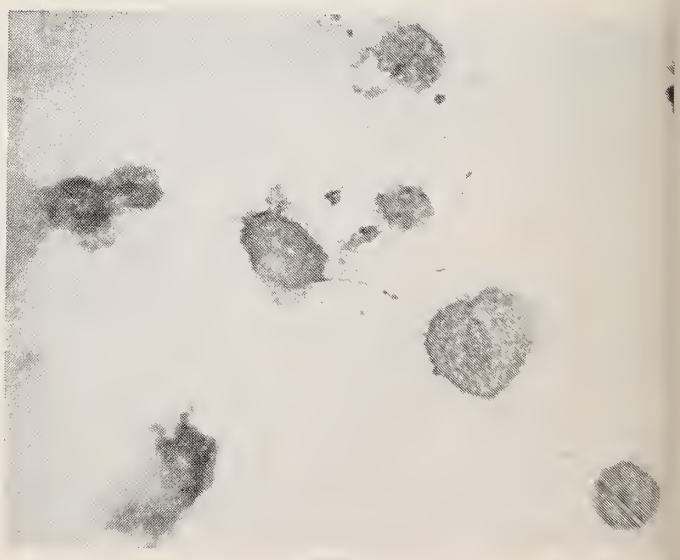

Figure 1
Trichonmonas vaginalis observed in fresh preparation. (40 X) Observe the presence of flagellae.

From the Department of Endocrinology and the Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta.

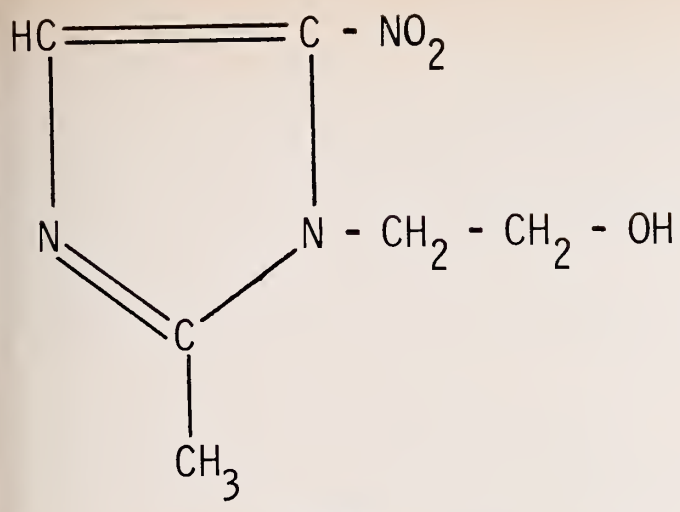

Figure 2
Flagyl structural formula: 1—(B—hydroxyethyl) 2—methyl—5—nitro-imidazole.

orally effective agent of proven clinical value has been metronidazole of 1 beta-hydroxyethyl-2-methyl-5-nitro-imidazole (Figure 2). This agent was first reported as having trichomonacidal properties in animals by Cosar and Julov in 1959[1]. In 1960, other French investigators demonstrated the effectiveness of this agent in clinical trials in both male and female patients[2]. Since that time the drug has proven of great clinical value and has been shown to have minimal side effects and toxicity in thousands of clinical therapeutic trials. One case was reported of a two month old child who was treated with 50 mg. daily of metronidazole for a severe trichomonas vaginitis and cure was obtained within ten days of treatment; no change in the blood count was observed[3]. This compound has been used widely in Europe, Canada and Mexico; in the United States it has been used extensively in clinical investigations for the past two or three years. Most reports in the United States indicate cure rates of 80-100 per cent[4-10] on the initial treatment and only a few cases have failed to respond to two courses of treatment.

Metronidazole (Flagyl) was given to 125 patients of which 28 failed to return, leaving a total of 97 patients with follow-ups. These patients comprise a sum of 104 trials (Table I).

Metronidazole was administered to patients via several different routes and regimens for 10-15 days as summarized below:

1. Oral dose of 250 mg. tablet twice daily.
2. Oral dose of 250 mg. tablet twice daily to patients and their husbands.
3. Oral dose of 250 mg. tablet twice daily and vaginal insertion of 250 mg. tablet twice daily.
4. Oral dose of 250 mg. tablet twice daily to patients and husbands and vaginal insertion of 250 mg. tablets.
5. Vaginal insertion of 250 mg. tablet twice daily.

TABLE I

Total Number of patients treated	**125**
No followup	**28**
Total Number with followup	**97**
Total Number of trials	**104**

In Table II the results of this study are summarized. Group I: In 72 trials, metronidazole was given orally only. Of these, 64 trials showed no infection with trichomonas from four weeks to six months later, but in eight trials trichomonads were found in the vaginal smear. In one of the patients with good results during the second trial, the husband was also treated. Group II: In 15 trials, the medication was given orally to patients and consorts. In this group 11 responded to treatment and four failed. There were two patients in this group in which good results were obtained during the second trial of metronidazole, but medication was also given vaginally and in one of these two patients the husband was not treated during the second trial. Group III: Medication was given orally and vaginally for a total of 12 trials. Only one trial failed to respond to treatment. Group IV: Metronidazole was given orally to both wife and husband and in addition vaginally to the wife for five trials and all responded successfully to treatment. Group V: Two cases were treated vaginally alone and in both trials, no trichomonads were found on follow-up.

In summary, of 104 trials, 91 responded to treatment and 13 failed to respond satisfactorily.

Discussion

For the last two decades, the treatment of trichomonas infections of the vagina has been primarily accomplished with the use of creams, jellies, foams and douches. In each instance, a so-called "cure rate" was found to be approximately 75-85 per cent. It was the experience of the clinicians, however, that these "cures" would often suffer a recurrence in six to 12 months and another course of

TABLE II

METHOD	TOTAL NO. OF TRIALS	RESULTS	1st TRIAL	2nd TRIAL	3rd TRIAL	TOTAL
1. ORAL only	72	Good	61	2*	1	64
		Failures	7	1	0	8
2. ORAL and HUSBAND	15	Good	9	2**	0	11
		Failures	3	1	0	4
3. ORAL and VAGINAL	10	Good	9	0	0	9
		Failures	1	0	0	1
4. ORAL, VAGINAL and HUSBAND	5	Good	5	0	0	5
		Failures	0	0	0	0
5. VAGINAL only	2	Good	2	0	0	2
		Failures	0	0	0	0
TOTAL NO. OF TRIALS	104	Good	86	4	1	91
		Failures	11	2	0	13

* Husband also treated orally in one trial.
** Both treated vaginally and one husband also treated.

treatment would be necessary. Since trichomonads are frequently found in male genital secretions, it has long been felt that reinfection readily occurs in susceptible females by sexual contact with infected males; and since the presence of trichomonads in the male is usually asymptomatic, this source of reinfection was impossible to control.

With the advent of an orally effective trichomonicide, a new approach to the problem of trichomonas control became available. Now the patient with vaginitis could be treated and in case of recurrence her husband could also be treated simultaneously. The necessity for frequent douches and the inconvenience and mess of jellies and creams would be eliminated, and treatment could be effected without regard for the occurrence of menses.

A large number of favorable reports[11-19] accumulated in the last three years attest to the effectiveness, convenience, and desirability of metronidazole in the control of this bothersome problem.

In the 104 courses of treatment herein reported, an overall success rate of 88 per cent was attained. After trying the medication in various combinations of orally, vaginally, and in combination with treatment of the husband, it was decided that the preferable approach was to administer a 250 mg. dose orally twice daily for 10-15 days to the woman for the initial treatment. In case of a recurrence the medication was advised for the husband and the wife concurrently in the same dosage.

Toxicity appears to be minimal since only one patient complained of nausea and two of glossitis. In four patients, a minimal drop in hemoglobin occurred, but never more than 1.5 grams. It is of interest to note that seven of 97 patients developed moniliasis following treatment of trichomoniasis with metronidazole.

Metronidazole (Flagyl) was taken by 97 patients for the treatment of Trichomonas vaginalis vaginitis in 104 courses of therapy. It was administered orally, vaginally, or in combination and in 17 cases the husbands were also treated. The oral route alone was found to be the most satisfactory; 89 per cent of the patients showed no recurrence when treated by this method. This course of treatment consisted of 250 mg. tablet twice daily after the morning and evening meal for 10-15 days. If recurrence developed, treatment was advised for both husband and wife.

From these studies it was concluded that oral metronidazole, has proven to be the most useful agent thus far encountered in the treatment of Trichomonas vaginalis vaginitis.

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A FORTUNE IS SPENT BUT NOBODY IS RICHER

The medically needy are today a minority amid a majority of sufficiency and affluence. Accordingly, they can be identified and helped on the local level with success and thoroughness never before possible. Nevertheless, our apostles of affluence propose coast-to-coast spending schemes that offer too little to those who need it and a dividend to those who don't. This is very much like the legend of the eccentric who leaves a million dollars to be distributed in $1 bills to one million people. A fortune is spent, but nobody is richer. When the fortune spent is public money, everybody is that much poorer.—Austin Smith, M.D.

CHROMOBLASTOMYCOSIS AGAIN APPEARS IN GEORGIA

Concerning my article, *Chromoblastomycosis, J.A.M. Georgia*, February, 1964: Vol. 53, I wish to say that the case I wrote about having seen years ago at Grady Hospital was reported by Dr. Howard Hailey, and represented the first instance of the above disease ever found in Georgia. Since that time Dr. William Dobes informs me that he also has diagnosed three additional ones. I believe this comment will add further interest to the problem.

Correspondence received from Jack C. Norris, M.D., author of the paper, "Chromoblastomycosis (Verrucous Dermatitis)", JMAG, Vol. 53, February, 1964.

PRACTICAL ASPECTS OF TUBERCULOSIS PROPHYLAXIS

Paul A. Pamplona, M.D., *Atlanta*

■ ***Skillfully applied, prophylactic measures now available can greatly reduce the number of active cases of tuberculosis in the future.***

BEFORE CHEMOTHERAPY came into use in the treatment of tuberculosis, physicians could do very little to change the course of primary tuberculosis in children and its feared complications. Miliary tuberculosis and meningitis were nearly always fatal. The drug isoniazid has changed this dramatically. Since this drug was introduced a little over ten years ago as a therapeutic agent in the treatment of tuberculosis, much has been learned also about its effectiveness as a prophylactic agent.

Today, with the knowledge and experience gained from the use of isoniazid, it is possible for physicians to prevent the complications which sometimes result from primary tuberculous infection. Carefully controlled studies, such as the one conducted by the Public Health Service in 2,750 children, have confirmed the value of isoniazid in preventing complications of primary tuberculosis.[1,2,3]

To Avoid Complications

To avoid extrapulmonary complications of a first infection by tubercle bacilli, prophylactic dosages of isoniazid should be given to all infants under one year of age who react to the tuberculin test (5 TU intradermally) and to all children from one to four years of age who are reactors and who, in addition, have X-ray evidence of a pulmonary involvement. They should be given five mg. of isoniazid per kilogram of body weight every day for one year.

The prophylactic administration of isoniazid in this manner not only practically eliminates the risk these children have of developing extrapulmonary complications of primary tuberculosis, but also appears to afford a certain degree of protection during ensuing years.

RISK* OF EXTRAPULMONARY COMPLICATIONS AMONG UNTREATED CHILDREN (3)

		Risk by Type of X-ray Involvement		
Age	*Risk with no X-ray Involvement*	*Hilar and/or Paratracheal*	*Parenchymal*	*Average Risk*
Less than 1	1 in 30	1 in 8	1 in 6	1 in 11
1 to 4	1 in 95	1 in 36	1 in 14	1 in 26

*During two years following diagnosis.

When a child less than four years old reacts to a tuberculin test, two important things are apparent. First, the child may be at high risk of developing the extrapulmonary complications of primary tuberculosis—a risk that can be avoided if the recommendations for isoniazid prophylaxis are followed. Second, because of the age, the child's exposure to active tuberculosis must have been comparatively recent. By examining the parents and other family associates, by paying particular attention to any grandparents, other older relatives, and friends of the family who visit frequently, the source case may be discovered and rendered noninfectious by appropriate therapy. It may also be possible to identify other young children in the family who are at high risk because they have been infected and who, as a consequence, should receive prophylactic isoniazid.

Today, physicians have a real opportunity to prevent the serious problems resulting from a complicated primary tuberculosis, if they tuberculin test (5 TU PPD) the young children they see in their practice and place the reactors on prophylactic isoniazid for a year.

Other studies of the prophylactic use of isoniazid among household contacts of tuberculosis patients

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Prepared at the request of the Publications Committee of the Georgia Tuberculosis Association.

with active disease have again shown how valuable the drug can be.[4,5] The results of these controlled trials conducted by the Public Health Service clearly indicate that isoniazid decreases the occurrence of both pulmonary and extrapulmonary tuberculosis among household contacts and protects the uninfected as well.

In this study, of a total of 25,512 contacts examined, 479 were found to have tuberculosis and were referred for treatment. They, therefore, were not included in the study. One-half of the remaining 25,033 contacts received isoniazid in daily doses of five mg. per kilogram of body weight for a year, and the other half received placebo. The group taking isoniazid experienced only slightly more frequent side effects than those taking placebo. Both groups were equally faithful in taking the pills.

The incidence of tuberculosis among contacts who were taking isoniazid was significantly lower than among those taking placebo during the pill taking year. In the isoniazid group as a whole, 23 cases occurred, whereas the placebo group had 94 cases. Five in the isoniazid group and 16 in the placebo group were primary disease in children who were nonreactors at the beginning of the trial. Extrapulmonary forms of disease occurred in only four of the isoniazid takers, whereas the others had 16 cases. There were 14 cases of adult pulmonary tuberculosis in the isoniazid group and 62 in the placebo group.

Useful as it is in preventing tuberculosis in contacts during the year when they are at high risk of developing the disease, the drug would be even more valuable if its protective effect continued. The results of continuing observation of this factor show promise.

The 19 cases per 1,000 that were found among household contacts when they were first examined emphasize the importance of prompt examination of these people. These trials also showed that, in the year following diagnosis of a case, other members of the family are at especially high risk of developing tuberculosis. The rate of tuberculosis among those taking placebo was 8.5 per thousand during that year. For such persons, isoniazid prophylaxis is an effective and practical measure to include in existing programs of contact supervision.

Prophylactic use of isoniazid is an important addition to the physician's armamentarium against tuberculosis. It allows him to treat persons for tuberculosis before its serious manifestations appear.

In tuberculosis control the treatment of the active case, over a period which affords the greatest protection against relapse, still has first priority. But prophylaxis for contacts and for young children at risk can greatly cut down the number of active cases of tuberculosis in the future.

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SOMETHING OF VALUE

There once was an honest carpenter whose complete faith was in the Lord. It was even said that his faith had so supplanted his worldly ambition that he did not need to venture into more profitable trade, but accepted his poverty with resignation.

As time passed his family grew. Food and clothing were often scarce but he always managed to stay out of the poor-house. His income was so unpredictable that he never went in debt for over fifty dollars in his life. His total worth never exceeded $2,000 including his life insurance.

However, this man was wealthy. He didn't say, like Will Rogers that he had never met a man he did not like, but the strength of his grip and the twinkle and warmth in his eyes assured any stranger that they had found a friend.

And he did love the women, giving as an excuse the old cliche that his mother had been a woman. He would always stand when a woman entered the room and would even give his chair to a ten-year-old girl.

Now in his old age he often speaks of fellow carpenters with whom he had worked. Almost without exception they are those who did a good job, took pride in their work, gave a full day's labor for a full day's pay, and whose comradeship in lean days of work formed a brotherhood of service that puts welfare agencies to shame.

And in his latter days of failing memory, increasing deafness, unsteady gait and doting, his children each in his own way spoke and said, "Because of you I live and because of you I too love life, inasmuch as you met me at the entrance with open arms and a glad heart, please allow me to accompany and minister unto you on your way to the exit.

John R. Andrews, M.D.

THE INDEX OF SUSPICION FOR TUMORS OF THE NECK

John E. Skandalakis, M.D., and
Stephen W. Gray, Ph.D., *Atlanta*

■ ***In the face of an alarming array of possible lesions causing swellings in the neck, one is sometimes at a loss even to begin diagnosis.***

CERTAIN CONVENIENT rules have been formulated following an analysis of over 1,600 patients with neck masses of non-thyroid origin seen in three Atlanta hospitals over a five year period.

The Rule of Seven

The time during which the mass has been present is probably the simplest method for separating the three major groups of lesions: Masses of congenital origin (thyroglossal duct cysts, branchiogenic anomalies, cystic hygroma) had been present for an average of *seven years* before giving other symptoms. Neoplastic masses had been present for an average of *seven months* before symptoms arose. Inflammatory swellings received attention after a mean duration of only *seven days*.

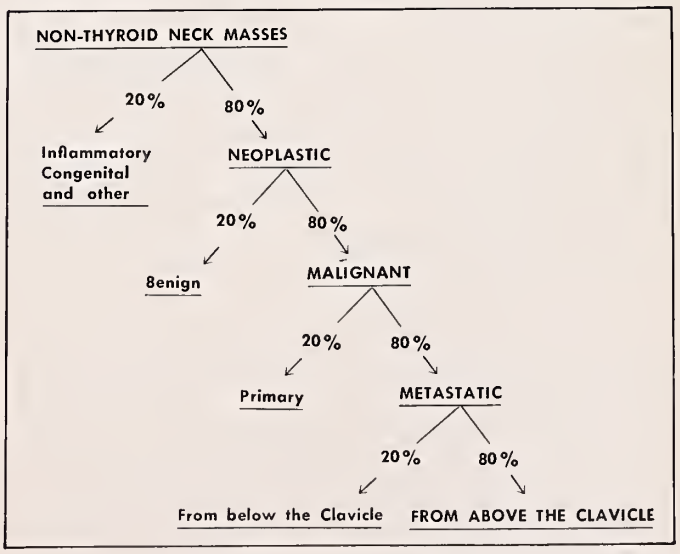
Age and Sex

Congenital masses attract attention in childhood, inflammatory masses tend to occur at puberty, neoplastic neck tumors appear late in life.

About 60 per cent of neck masses are found in male patients, but the neoplastic tumors are responsible for all of the difference. Three-quarters of them are found in males.

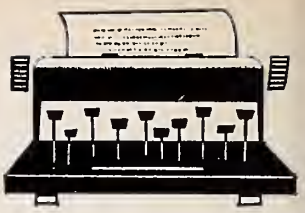
About 80 per cent of all of the neck non-thyroid masses were found to be neoplastic, while 20 per cent were of congenital or inflammatory origin. Of these neoplasms, 80 per cent were malignant and the remainder benign. Again 80 per cent of these malignancies were metastatic from elsewhere in the body, while 20 per cent were primary. Of these metastatic tumors, 80 per cent had their origin above the level of the clavicle.

The detailed figures on this series of neck tumors have been published previously. Here we are concerned only with "channel markers" to direct suspicion by means of some rules of probability. By emphasizing these four steps in diagnosis, we hope to direct attention first to the lesions at once the most common and the most dangerous.



From the Department of Surgery, Piedmont Hospital, Atlanta; and Department of Anatomy, Emory University, Atlanta.

EDITORIALS



MAG Activities on Upswing

It might be said that the Medical Association of Georgia is rolling on all eight cylinders.

The authority of this statement is based on the MAG Calendar which is an accurate measure of Association activity. To wit, let's see just what MAG has been doing during the last two months.

It started with legislative activity when the Georgia General Assembly convened. Arrangements were made for AMA President Edward Annis to address a joint session of the Georgia Senate and House. Concurrent with this, the Association was heard both pro and con on some 12 legislative bills.

Then a statewide Conference on Mental Health was convened in Milledgeville with about 200 persons in attendance. Next, a study of "medical indigency" necessitated the appointment of a special association committee which has met on three occasions.

Keynote

Still another meeting was keynoted by Governor Carl Sanders at the Annual MAG County Medical Society Officers Conference with approximately 100 county society leaders in the audience. The following week, MAG's Board of Governmental Medical Services met to undertake a study of certain State Health Department programs in an advisory capacity. And in yet another related activity, the Georgia Hospital-Medical Council approved criteria for Nursing Home Standards and Guidelines for Relations Between Hospitals and Radiologists.

MAG also successfully co-sponsored a Regional Conference on Health Quackery with some 350 educational leaders participating. With Atlanta as the center of the Southeast, national organizations seek local arrangements advice and participation from MAG. Three of these meetings in which MAG was involved were: AMA and American Hospital Association meeting on "Long Term Health Care Planning and Facilities;" an AMA "Southeastern Regional Conference on Health Insurance and Prepayment;" and an AMA meeting of State Association Executive Secretaries from six southeastern state medical associations.

Meanwhile, "back at the ranch," the Association is tooling up for its 110th Annual Session to be held in Macon on May 3, 4, 5 and 6 at the Macon Auditorium.

Well, the moral of this busy story is that MAG is involved—that MAG is doing things and therein lies its reason for being.

The Tobacco Question

The recent report by the Advisory Committee to the Surgeon General has caused something more than a ripple among the general population as well as the tobacco industry. Paradoxically, perhaps, the report has caused far less impact among members of the medical profession simply because the opinions voiced in the pronouncement were already familiar to most well informed physicians.

Creditable Job

The committee did a very creditable job of bringing together in a 387 page report, the results of many years investigation by scores of competent scientists in a variety of scientific disciplines. No original research was attempted by the committee. The conclusions drawn were as expected. In effect, the report implicated cigarette smoking as a factor in the causation of carcinoma of the lung, chronic bronchitis, pulmonary emphysema and some instances of arterial disease.

The interrelationships of smoking and health are undoubtedly complex. Complete answers are not forthcoming in the immediate future. Even though the full picture is admittedly incomplete, physicians as a group have tended to cut back on their cigarette smoking habits perhaps more consistently than any other group. As physicians we are all impressed with the extreme and unexplained variability in the susceptibility of various patients to the irritating effects of tobacco smoke.

What is the role of radioactivity in polonium recently reported? What are the full implications of the recently reported protective effects of baldness against lung carcinoma in those who choose to smoke cigarettes? What is the role of cigarette paper in the whole picture? What has the temperature of the burning tobacco to do with the ultimate potential hazard of smoking? Where does genetic variation fit into the picture of susceptibility to organ damage? Since so many of these relations remain unsolved, the American Medical Association has initiated a vigorous research program backed by a budget of ten million dollars in an attempt to further clarify some of these questions.

It is not proposed that caution with regard to cigarette smoking should be thrown to the winds until these very complex problems are clarified. On the contrary, we as physicians owe it to our patients to inform them of the possible hazards of smoking in the causation of these several disease entities. But let us as physicians make it clear to our patients that we are not against tobacco or good taste or satisfaction as such. We are only against disease.

The Treatment of Offenders

One frequently hears that law breakers or offenders suffer from a specific kind of neurosis, or emotional difficulty, and thus must be treated as a single pathologic group. This hypothesis has not held up, as recent therapeutic experiences of the Association for Psychiatric Treatment of Offenders would seem to demonstrate. No one personality type, or illness category, encompasses even a majority of offenders; the range runs from the sickest of schizophrenics to the undisciplined normal, and includes such elements as the psychoneurotic and psychopathic personality.

Largest Minority

Nevertheless, perhaps the largest single minority of offenders falls into a category of illness which stands midway between (psychotic) schizophrenia and (amoral, antisocial, or impulsive) psychopathic personality. These individuals differ from the classic psychopaths in that they can experience tremendous guilt feelings together with other symptoms of emotional discomfort; they differ from the schizophrenics in that they do indulge in a great amount of impulse-determined behavior which frequently is asocial or even anti-social. Furthermore, they rarely appear to be as "sick" as the schizophrenics. Apparently, the individuals of this offender category started out by being potentially quite psychotic. Early in their development they generally attempted to achieve equilibrium with the ordinary neurotic mechanisms. However, such defenses proved inadequate. Nevertheless, they have been kept from plunging into the deepest abyss of psychosis by this second line of defense, the asocial behavior which is based on impulse gratification. Thus, at one moment they look like psychopaths, and the next moment they look like not-quite-disorganized schizophrenics. These people are not of sufficient strength to undergo standard psychanalytic procedures, (a process best suited to those with more psychoneurotic components), but must be handled with different and more flexible techniques.

Element of Volition

Another point of difference between treatment of offender groups, and treatment of psychiatric patients in general, is the element of volition. Offenders most frequently come to treatment as a condition of probation, parole or rehabilitation, and thus negate the classic premises that all therapy must start as a voluntary activity on the part of the patient. Therefore, the physician-patient relationship in any event precludes the classic idea that the therapist is a neutral figure, approached by a patient free of preconceived attitudes.

In sum, then, we find that the therapist must take a role essentially different from that to which he is accustomed. First, offender patients mostly do not offer the opportunity to work with classic psychoneurotic mechanisms. Second, offender patients are largely involuntary visitors and thus do not offer the therapist his usual opportunity to build up a physician-patient relationship from the classic starting point of absolute neutrality.

First Task

The therapist's first task, then, is to become friendly or personal in a positive sense. This is essential to the establishment of any continuing relationship at all, as the offender starts with a tendency to antipathy which makes the whole situation tenuous and vulnerable. Further, the offender patient's per-

sonality strength is so weak that rather than having his standard defenses attacked, the indicated approach is a relationship wherein he is permitted to develop an identification with the (relatively) healthy and (relatively) strong therapist. This contrasts with standard procedures which stress analysis of defense mechanisms and motivations. Frequently, then, in treatment of the offender, what transpires resembles a "Big Brother" movement. Therefore, such devices as flexibility of scheduling and flexibility of duration of appointments are indicated. Such "intimate" contact, e.g., as sharing a coffee break, watching a ball game, or just going fishing together is within the range of acceptability whereas such activity certainly would not be permissible in the classic situation.

The Therapist

For the aforementioned purposes, therapists need not be trained psychiatrists, because in the first place, the latter are scarce, and in the second place, psychiatrists would not be called upon to contribute all their complex skills. It is more essential that the therapist possess a fairly sturdy and healthy personality structure than that his training be exhaustive. Thus we may find that social workers and members of other ancillary disciplines may be the ones to assume such therapeutic roles.

There are exceptions, of course. Although most offenders come to treatment involuntarily, a certain percentage has a more positive attitude. Furthermore, as mentioned above, the offender group does encompass many categories of illness and some categories of normalcy. Thus we find that there are those offenders who can be treated more like the other group of patients. It is not surprising that we should conclude that a good intake and diagnostic procedure is indispensable. Here, as in other instances of pathology, treatment is unthinkable without an adequate prior diagnostic impression.

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1964 CALENDAR OF MEETINGS

State

April 15—Medical Seminar sponsored by the Georgia Academy of General Practice and the Ninth District Medical Society, Elks' Club, Gainesville.

May 2—Alumni Reunion, Medical College of Georgia, Class of 1934 and their dates or wives, Dempsey Motor Hotel, Macon. John Bell, M.D., Dublin, *Chairman.*

May 3-6—110th Annual Session of the Medical Association of Georgia, Macon, Ga.

May 14-16—Contact Lens Seminar for Ophthalmologists and Technicians, The Department of Ophthalmology, 705 Juniper Street, Atlanta.

May 15-16—Georgia Heart Association Annual Meeting, Americana Motor Hotel, Atlanta.

August 9-14—Annual Southeastern School of Alcohol Studies, Center for Continuing Education, University of Georgia, Athens. Contact: *Charles B. Methvin, 1260 Briarcliff Rd., N.E., Atlanta, Ga. 30306.*

Regional

April 13-16—American Radium Society, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 15-18—West Virginia Academy of Ophthalmology and Otolaryngology, Greenbrier Hotel, White Sulphur Springs, W. Va.

April 23-25—American Gastroenterological Association, Sheraton Hotel, Dallas, Texas.

April 27-28—Society of Head and Neck Surgeons, Peabody Hotel, Memphis, Tenn.

April 30-May 2—American Association for History of Medicine, Sheraton-Park Hotel, Washington, D. C.

May 2-6—Medical Society of State of North Carolina, Greensboro, N.C.

May 5-7—South Carolina Medical Association, Ocean Forest Hotel, Myrtle Beach, S.C.

May 6-10—Florida Medical Association, Diplomat Hotel, Hollywood-by-the-Sea, Fla.

May 11-14—Aerospace Medical Association, Americana Hotel, Bal Harbour, Fla.

May 17-22—American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour, Fla.

May 21-23—Eighth Biennial Cardiovascular Seminar, sponsored by the Heart Association of Greater Miami, Carillon Hotel, Miami Beach, Fla.

May 25-27—American Gynecological Society, The Homestead, Hot Springs, Va.

May 28-30—American Ophthalmological Society, The Homestead. Hot Springs, Va.

May 31-June 2—American Medical Women's Association, Roanoke Motel and Motor Inn, Roanoke, Va.

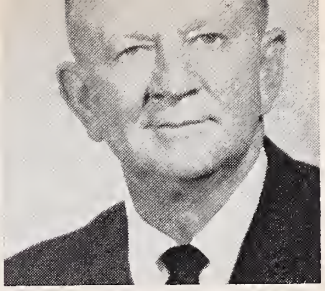
August 24-27—Fourth Inter-American Conference on Toxicology and Occupational Medicine, sponsored by the University of Miami School of Medicine with the cooperation of the University of Puerto Rico School of Medicine, Fountainebleau Hotel, Miami Beach, Fla.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La. Jolla, Calif.

April 29-May 3—Student American Medical Association, Sherman House, Chicago, Ill.

June 21-25—American Medical Association Annual Meeting, San Francisco, Calif.



MAG AND LEGISLATION

GEORGE R. DILLINGER, M.D.

INASMUCH as this will be my last opportunity to address you through the President's Page, I would like to report to you on a subject that I feel is particularly appropriate at this time; namely—legislation.

The Medical Association of Georgia has recently completed one of its most rigorous legislative sessions with the Georgia General Assembly in many years. The results were good so I can only conclude that the many man-hours of painstaking work required by many people were well worth the efforts.

Of primary concern to the medical profession during the '64 session of the General Assembly was a broad, all encompassing bill to recodify the state's health laws and in many instances write new laws.

Composition and Method

The most serious parts of this 186 page bill were those sections relating to the composition and method of appointment of the State Board of Health. MAG took the position, and in my judgment rightfully so, that the scientific character of the Board must be preserved substantially intact if the Georgia Department of Public Health was to maintain its position of preeminence among state health departments throughout the nation. I am most happy to report that this was accomplished.

In another area of vital concern to the medical profession, legislation to help close the paramedical education gap was enacted. During the closing days of the session a bill establishing a Commission on Scholarships was passed and sent to the Governor for signature. This Commission would be a constitutional entity and for this reason must be voted on by the people as a Constitutional Amendment before it can actually be created. Accordingly it will appear on the ballot at the general elections this fall seeking a favorable expression from the people.

The Scholarship Commission will have authority in the broad field of educational need. However, it was the field of paramedical education which inspired this legislation, and for this reason it is felt that the awarding of scholarships in these areas will have high priority with the Commission.

At the beginning of the 1964 term of the legislature MAG had high hopes for the passage of a supplemental appropriations act which would have included additional monies for the implementation of the MAA (near needy) provisions of the Kerr-Mills Law.

A petition was circulated among the members of the House of Representatives for the purpose of indicating support for this program in the lower chamber. All appropriation acts must originate in the House. Although approximately 75 per cent of the House demonstrated that they favored expansion of the present Kerr-Mills program, these efforts failed, in the final analysis, to produce the additional money necessary for expansion. Since that time, however, Governor Sanders has pledged publicly that he will seek additional funds during the 1965 General Assembly for the further implementation of this much needed program of hospital and nursing home assistance to near needy individuals.

As in years past MAG had its running legislative battle with the podiatrists and osteopaths. If it is possible to generalize on these two issues, it can be said that they were efforts to invade the prerogatives of the medical profession in areas about which grave doubt exists regarding the professional qualifications of these groups of "practitioners."

While things were going generally well at the State Capitol, it should be remembered that medical legislation in Washington remains in the critical stage.

At the time of this writing the King-Anderson bill is still pending, none too peacefully, in the House Ways and Means Committee. The President has promised a spartan effort to ramrod this legislation through the Congress in time to reap its political benefits at the polls this November.

One Great Obstacle

The one great obstacle to the passage of the King-Anderson bill is YOU. Your letters to Congress have had a telling influence on the long legislative history of King-Anderson. What we have done in the past, however, is no measure of what we must continue to do if we are to defeat this legislation.

The plea for letters to your Congressman has been made many times, and I will make it again. There is no substitute for this.

In closing, permit me to thank each of you for the honor and privilege of serving as your President during the past year. It has been a rewarding experience and one I will cherish always as I continue to lend my every support to a stronger more effective Association.

CANCER PAGE

CANCER OF THE HEAD AND NECK

Edwin C. Pound, Jr., M.D., *Atlanta*

PERHAPS NO OTHER area of the body, comparable in size, gives rise to as many anatomic varieties of malignant tumors as the head and neck. The great majority of tumors arising in this area are readily accessible and should undergo early diagnosis and treatment; however, cases are often seen in which a state of incurability has been reached due to a patient's own neglect from fear or incredibility of his disease state or delay in the institution of proper diagnostic and therapeutic measures by more responsible parties.

Treatment Important

Treatment of the primary lesion is of greatest importance and requires detailed knowledge of the natural history and characteristics of each tumor. With the exception of melanomas and thyroid carcinomas, which have a high incidence of vascular metastasis, most neoplasms of the head and neck spread mainly through lymphatic channels, which are entered by direct invasion. This spread is usually unilateral but can be bilateral if the primary tumor is located near the midline or if enough blockage occurs on one side of the neck to cause retrograde leakage to the other side.

Death from cancer arising in the head and neck area usually occurs with the primary lesion and metastases still confined above the clavicles. Therefore, operative procedures have been devised which widely remove the primary tumor in conjunction with the pathway of lymphatic spread. Although these operations may be quite radical in scope with wide sacrifice of tissue, present day reconstructive procedures can be utilized, often primarily, to make the end result a satisfactory one both cosmetically and functionally.

Bilateral cervical metastases should not be considered a contraindication to surgery since the five-year cure rate for these unfortunate individuals is approximately 30 per cent. Distant metastases, fixation of cervical nodes to underlying structures, evidence of secondary lymphatic skin invasion, and severe physical disabilities, however, are contraindications except to palliative procedures.

The merits of irradiation versus surgery in the treatment of head and neck cancer have often been expounded by advocates of one school or the other, but it is generally accepted that both forms of treatment have a place and depending upon the clinical situation, each can be used alone or in combination with the other for the best end results.

Chemotherapy

In recent years a new phase of cancer therapy has been established in which attempts have been made to control or destroy the growth of certain forms of cancer by chemotherapeutic techniques. Isolated perfusion or intra-arterial infusions now allow cytotoxic compounds to reach areas of neoplasia in amounts greater than previously possible by systemic methods. These compounds are particularly injurious to cells which divide frequently, such as cancer, but toxicity to the normal bone marrow still limits the amount which may be used. Extensive research is now underway for analogues of these compounds which are more selective for cancer cells.

Relief of pain is usually striking and at least some temporary regression in growth occurs following most regional perfusions with these compounds; therefore, these techniques have become a valuable adjunct to the therapy of head and neck tumors.

Summary

Earlier diagnosis and modern therapeutic techniques offer longer survival with less disfigurement and pain than ever before for unfortunate patients with head and neck cancer.

1293 Peachtree Street, N.E.

Approved by Professional Education Committee, Georgia Division ACS.

THE PRESENT STATUS OF CORONARY ARTERIOGRAPHY

Wade H. Shuford, M.D., *Atlanta*

In discussing the role of coronary arteriography in the study of patients with heart disease, it is worthwhile to divide the indications into two categories: 1) Acquisition of pure knowledge and clinical investigation, and 2) practical application.

Little Disagreement

Of the first category there can be little disagreement. Putting aside the need of coronary arteriography in the diagnosis of coronary artery disease or the place of surgery in its treatment, considerably more knowledge of coronary atherosclerosis is necessary for the proper understanding of this disease. At Grady Hospital and Emory University considerable work has been done in selective renal arteriography, and while it is true that this procedure has not significantly affected the prognosis and management of many of the patients, our knowledge and understanding of renal disease has been vastly increased. I am certain that coronary arteriography will be equally helpful in our understanding of coronary artery disease. Many examples could be cited for the use of this procedure as an investigative tool.

Difference of Opinion

It is in the second category that differences of opinion exist. If a clinician feels that he can accurately diagnose coronary artery disease and that surgery has no place in its treatment, obviously coronary arteriography has no practical applications. However, the experience of the workers at the Cleveland Clinic and Hahnemann Hospital suggests that our present methods of diagnosing coronary artery disease leave a great deal to be desired. It is in the patient with obscure chest pain, when the presence or absence of coronary artery disease influences the medical or occupational management, that coronary arteriography is perhaps most helpful. Coronary arteriography is also of value in the preoperative evaluation of patients for aortic valve surgery and in young individuals with known coronary artery disease in an effort to establish the degree of coronary artery involvement. In the diagnosis of anomalies of the coronary arteries in the pediatric age group, particularly anomalous origin of the left coronary artery from the pulmonary artery, coronary arteriography is invaluable.

Surgical Treatment

At present very little surgery is being done in the treatment of coronary atherosclerosis. Endarterectomy is generally not worthwhile because of the diffuse nature of the disease process. The group at the VAH at Oteen, N. C., has performed approximately 35 Vineberg type operations, and coronary arteriography has shown retrograde filling of coronary vessels by way of the implanted internal mammary artery in some instances. This operation has its greatest indication in patients with severe anterior descending vessel disease in whom the remainder of the coronary tree is reasonably good. Coronary arteriography is necessary for the preoperative evaluation of these patients. There is insufficient time and experience available to properly evaluate this operation.

The problem of reliability of coronary arteriography is difficult to answer. In general, most investigators feel that arteriography underestimates the severity of atherosclerosis, revealing less disease than was assumed clinically.

In the hands of experienced workers this procedure is safe. To date, Sones has performed over 2,000 coronary angiograms, with one death during the most recent 1,000 cases. Unquestionably the technique developed by Sones of selective injection of each vessel utilizing 35 mm. cinerecording is the best.

80 Butler Street, S.E.

References

1. Likoff, Wm.: Personal Communication.
2. Proudfit, Wm.: Personal Communication.
3. Sewell, Wm.: Personal Communication.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

WHAT NOT TO DO

John L. Moore, Jr., *Atlanta*

A 1958 UTAH decision indicates a trap into which a busy and probably well-intentioned physician can fall.

A Wyoming doctor had as patients the parents of a young lady who was keeping company with Mr. Berry. Although Mr. Berry was not the Wyoming doctor's patient, he requested information from Dr. Moench, who practiced in Utah, relative to his treatment psychiatrically of Mr. Berry some years before.

Dr. Moench wrote the following letter:

"Dear Dr. Hellewell:

Since I do not have his authorization, the patient you mentioned in your last letter will remain nameless.

He was treated here in 1949 as an emergency. Our diagnosis was manic depressive depression in a psychopathic personality ***

He had one brother as a manic, and his father committed suicide **

The patient was attempting to go through school on the G.I. bill *** Instead of attending class he would spend most of the days and nights playing cards for money.

Because of family circumstances, we treated him for a mere token charge (and I notice even that has never been paid).

During his care here, he purchased a brand new Packard, without even money to buy gasoline.

He was in constant trouble with the authorities during the war, ***

*** did not do well in school, and never did really support his wife and children.

Since he was here, we have had repeated requests for his record indicating repeated trouble. ***

My suggestion to the infatuated girl would be to run as fast and as far as she possibly could in any direction away from him.

Of course if he doesn't marry her, he will marry someone else and make life hell for that person. The usual story is repeated unsuccessfull marriages and a trail of tragedy behind."

The letter was relayed by Dr. Hellewell to the girl's parents who turned it over to their daughter. The parents became violently opposed to the marriage and have since disowned their daughter because she went ahead and married Mr. Berry anyway.

It is not hard to guess what happened. Mr. Berry sued Dr. Moench for libel. The plaintiff won. It is interesting to see what the Supreme Court of Utah found as to the statements made in the letter.

It said that Dr. Moench was uncertain as to what information came from what sources and much of it may have come from Mr. Berry's former wife who was married to him at the time of treatment and also from her sister. The court said:

> "Experience teaches that an unhappy wife of a blighted marriage is not usually the most impartial source of information as to the conduct and character of a disappointing husband; less so a sister-in-law."

Plaintiff did well in grade school being in the top of his class every year and finished in the top one per cent of his high school class. His statement that Mr. Berry was in constant trouble with the authorities turned out "this simmered down to about three incidents of minor importance." As to the Packard car, the plaintiff proved that he had $200 in the bank and had received a $4,000 inheritance at the time he bought it. As to his not having paid the doctor's bill, the evidence showed that the bill had been $50, all but $5 having long since been paid. In answering, Dr. Moench relied on a red tab on the patient's card indicating an unpaid bill. If he had read the information on the card, he would have known that practically all of it had been paid.

Information Only

Of course, the court recognized that a medical doctor has a conditional privilege to disclose information about his patients provided the proper information only is given to proper persons only. However, in this case the Supreme Court found that the doctor was guilty of "malice in law," said to be found from all the facts and circumstances in this case. It should be observed that in all probability the doctor had no actual malice against Mr. Berry but responded to the inquiry too rapidly and without checking thoroughly enough even the records in his own office.*

Suite 1220
C&S Bank Building

*The case mentioned is *Berry* v. *Moench*, 8 Utah 2d 191, 331 P. 2d 814 (1958).

Prepared at the request of The Medical Association of Georgia. Mr. Moore is a member of the firm of Alston, Miller & Gaines, General Counsel of The Medical Association of Georgia

CHICAGO — FEBRUARY 14-15, 1964

THE TENTH ANNUAL CONFERENCE OF MENTAL HEALTH REPRESENTATIVES OF STATE MEDICAL ASSOCIATIONS

SPONSORED by the AMA Council on Mental Health, this meeting was well attended by the State Mental Health Committee Chairmen, Directors of State Programs and Medical Association Executive Secretaries.

Reports Given

The first general session was devoted to reports by members of the AMA Council on Mental Health. Drs. Dale Cameron and Marvin Block spoke of progress on the Narcotic Addiction and Alcoholism Programs respectively. The Mental Health Program of the AMA Woman's Auxiliary was reviewed by the Chairman of its Mental Health Committee, Mrs. Robert Garrard. Among their many projects were prevention of mental illness through education and an all-out suicide prevention program. Dr. Julius Richmond emphasized the importance of an active program to assist the mentally retarded and the National Conference on Mental Retardation to be held in April, 1964. Dr. Dana L. Farnsworth announced plans for the Second National Congress on Mental Illness and Health which is to be held in Chicago in November, 1964. The theme of this Second Congress is to be: (1) Community mental health resources; (2) Ways in which the non-psychiatric physician can participate; and (3) Not what to do, but how to do it! The non-psychiatric physicians are especially urged to attend this Congress.

Acute Emergency

A panel discussion was presented on the need for care of the patient with an acute psychiatric emergency. Out-patient and in-patient facilities, especially those related to the general hospital emergency services, were emphasized as was the program of home visits and home treatment when possible.

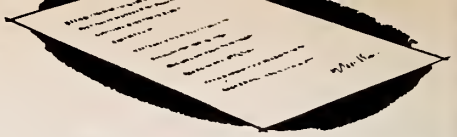
Regional meetings were held for discussion of problems related to states in various parts of the country. The representatives from Georgia met with those from Alabama, Mississippi, Florida, South Carolina and Tennessee. Here the respective mental health programs were described and compared. Each regional group was asked to present what they considered to be the three major mental health problems. These were: (1) How to involve non-psychiatric physicians in state mental health programs; (2) How to involve non-participating psychiatrists in community mental health programs; and (3) How to involve the state and county medical societies in community mental health programs.

Points Emphasized

In the summary of regional group discussions the above needs were emphasized as were the following points as means of enhancing community mental health programs: (1) To encourage state congresses on mental health; (2) To encourage the development of emergency services for the acute psychiatric patient; (3) To encourage post-graduate psychiatric training and education for the general physician; (4) To avoid construction of buildings before function and services are clearly defined; (5) How to reach the non-urban areas and (6) To encourage better communication between medical societies and other agencies.

The final session was devoted to a panel discussion of "The Role of State Medical Societies in Mental Health."

Jas. N. Brawner, Jr., M.D., Chairman
Mental Health Sub-committee of MAG



Foster, Richard S., M.D.; Wade Shuford, M.D.; Charles Rieser, M.D., Elbert P. Tuttle, Jr., M.D.; and Milton J. Deitch, M.D., Emory Hospital, Atlanta 22, Georgia, "Selective Renal Angiography in Clinical Urology," J. Urol 90:631-641 (Nov.) 63.

Aortography as a means of demonstrating the vascular supply to the kidney and lesion of the parenchyma has become universally accepted. Selective catheterization of the individual renal arteries by the percutaneous transfemoral route offers advantages over the method of conventional aortography. The advantages are: (1) The catheter used is of smaller diameter, (2) Volume of contrast media averages less than ten cc., (3) Superimposed extrarenal arteries are not filled and thereby do not confuse interpretation of the X-ray, (4) The entire renal arterial tree including the minor cortical vessels are filled regardless of rate of renal blood flow, (5) Procedure is painless, (6) Rate and distribution of blood flow can be observed. The disadvantages of this method are: (1) The procedure is time-consuming, (2) Special radiologic equipment is required, (3) Multiple renal arteries arising from the aorta occur in approximately 25 per cent of people. The smaller arteries may not be technically catheterized. In this instance conventional aortography is indicated.

Eighty patients with a wide variety of circulatory and parenchymal lesions of the kidney were studied at Grady Memorial Hospital. The minute details of the arterial circulation, the nephrographic phase of staining of the renal parenchyma and the venous phase depicting the main renal veins were studied in the normal kidney. Characteristic alterations of the normal were delineated and described in detail in the following conditions: (1) Mass lesions-neoplasms, cystic diseases such as simple, parapelvic, polycystic, (2) Hydronephrosis, (3) Chronic pyelonephritis, (4) Main, segmental, and small arterial lesions such as occur in hypertensive disease, both benign and malignant, and arteriosclerosis, (5) Arterial venous malformations, (6) Main renal vein thrombosis. No complications of consequence occurred.

Franch, Robert H., M.D., and Britt B. Goy, Jr., M.D., Emory Hospital, Atlanta 22, Georgia, "Congenital Stenosis of the Pulmonary Artery Branches," Am. J. Med. 35:512-529 (Oct.) 63.

Stenosis of the pulmonary artery branches may be divided into the following: type I, single central stenosis; type II, bifurcation stenosis; type III, multiple, peripheral stenoses; and type IV, combined central and peripheral stenoses. Well over half of the cases are accompanied, and thus frequently masked, by an associated cardiac defect. In these cases the first diagnosis of stenosis of the pulmonary artery branches is usually made either at surgery or in the catheter room, especially if selective angiocardiography is performed.

The diagnosis of isolated stenosis of the pulmonary artery branches is to be considered in a patient with evidence of right ventricular preponderance and an atypical, frequently distant, holosystolic, or less often, quasicontinuous murmur in the second intercostal spaces well transmitted to the lungs. On the plain roentgenogram, the lung fields should be searched for vascular dilations. Fluoroscopy with image amplification may reveal intrinsic pulsations separate from the hilar vessels. At catheterization, wide pulse pressure is noted in the main pulmonary artery; a pressure differential can be measured across the stenotic segments. Usually, confirmation of the diagnosis must await angiocardiography.

Some patients apparently tolerate their disease well for years. In others, intimal fibrous proliferation and thrombosis may progressively narrow already stenotic vessels and lead to right ventricular failure. The dilated poststenotic, veinlike pulmonary arteries may become aneurysmal; troublesome, if not fatal, bleeding can follow. Endarteritis is an additional possible complication.

To date, surgical therapy has been directed to the removal of pulmonary artery aneurysms and to dilation, widening or resection of the single central type of branch pulmonary artery stenosis. Knowledge of the natural history of isolated stenosis of the pulmonary artery branches and an understanding of the evolution of structural changes in these vessels is yet incomplete.

Thomas, Robert P., M.D., Medical College of Georgia, Augusta, Georgia, "Glycerin—An Orally Effective Osmotic Agent," Arch. Ophth. 70:625-628 (Nov.) 63.

Glycerin (glycerol) has been found to be an effective agent when administered orally for lowering intraocular pressure. The dose is 1.0 — 1.5 cc./kg. of body weight. The effect is rapid in onset but transient in nature, lasting three to six hours depending to some extent on the initial response. Side effects have been minimal consisting chiefly of headache. The agent advoids the direct introduction of hypertonic solutions, such as urea and mannitol, into the vascular system and should prove useful when oral medication is not contraindicated.

Herring, John M., M.D., Warm Springs, Georgia, "Correction of Deformity with Orthetic Devices," Arch. Phys. Med. & Rehab. 44:537-540 (Oct.) 63.

Neuromuscular diseases frequently cause severe skeletal deformities which may produce more physical handicap than the disease itself. Various types of braces have been used to correct or reduce these deformities by stretching the contracted periarticular tissues which hold the joints in the deformed position. This paper considers three common deformities and the orthetic devices which can be used to correct them. The three are knee flexion contracture, a common foot deformity consisting of varus and forefoot adduction, and a type of scoliosis known as dynamic pelvic obliquity. Correction of these deformities is accomplished by creating with the appropriate brace a bending moment or the well-known three-point effect. This force system is reasonably effective in stretching tight areas and realigning skeletal segments and can be applied to many parts of the body.

Scordino, Peter L., M.D.; Charles L. Prince, M.D.; and C. T. Su, M.D., Savannah Urological Clinic, 2515 Habersham Street, Savannah, Georgia, "An Aftermath of Pyelonephritis," J. Urol. 90:516-520 (Nov.) 63.

The frequency of urinary tract infection in females prompted a study of 278 consecutive surgical procedures for nephrolithiasis in an effort to determine a possible relationship between the incidence of urinary tract infection and of renal calculi. One-hundred eighty-one of the patients were female in contrast to the 97 male patients. The female patients were younger; they had 79 of the 101 branched or staghorn stones; they outnumbered the males in both the white and Negro population with regards to stone formation. It is suggested that renal calculous disease is associated with urinary tract infection to a greater degree than previously appreciated. There is a causal relationship between urinary tract infection and renal calculous disease especially of the branched type.

Guest, James L., Jr., M.D., Medical College of Georgia, Augusta, Georgia, "Nonspecific Ulceration of the Intestine," Surg. Gynec. & Obst. 117:409-416 (Nov.) 63.

Nonspecific ulceration is a rare and poorly understood malady which, though etiologically obscure, mimics peptic ulcer of the duodenum in its pathological picture and in its potentially lethal complications of perforation, hemorrhage and obstruction. The ulcerations occur both in the small intestine and the colon, involving the ileum twice as frequently as the jejunum and the cecum in roughly one-half the colon cases. The lesions may be multiple or recurrent. The clinical manifestations are those of inflammation, obstruction, bleeding or perforation. The lesion has most frequently masqueraded as carcinoma. The diagnosis has been made preoperatively or premortem on only rare occasions. Manifestations suggesting nonspecific ulceration are: symptoms suggesting peptic ulcer without X-ray evidence, especially with tenderness below and to the left of the umbilicus. repeated attacks of intestinal obstruction without apparent cause, peritonitis the source of which is obscure at laparotomy, changing filling defects in colon on repeated contrast enema examinations, decreased motility and dilatation of the upper jejunum. The best treatment is surgical excision of the involved segment of intestine. In perforative disease, management must be individualized but conforms to standard surgical principles of closure of the perforation, drainage, exteriorization or proximal diverting colostomy in appropriate cases.

DEATHS

J. W. WALLACE, retired Douglas physician, died February 9, 1964, in Albany following an extended illness. He was 77 years old.

Dr. Wallace, who came to Douglas in 1929, was an impelling force in the progress of the Coffee County Health Center.

At Piedmont College, he studied pre-medical courses and later enrolled at the Medical School of the University of Georgia, where he graduated in 1913.

He received the following degrees in public health: B. S. in 1926; M. S. in 1928. Before accepting a position as public health director in Indianola, Mississippi, he was an intern for two years at Lamar Hospital in Augusta.

Survivors include one son, one daughter, and four grandchildren.

SOCIETIES

Robert Ireland, M.D. of Macon presented a talk on cardiac arrhythmias at the February 11 meeting of the BALDWIN COUNTY MEDICAL SOCIETY held in Milledgeville.

W. C. Sams, Jr., Ocilla, has been elected President of the BEN HILL-IRWIN MEDICAL SOCIETY. He succeeds George Mixon, also of Ocilla, to the post. J. E. Smith of Fitzgerald was elected Secretary-Treasurer of the association, and Ralph Roberts and Roy Johnson were named delegates to the Medical Association of Georgia.

Officers of the DOUGHTERY COUNTY MEDICAL SOCIETY attended the Sixth Annual County Medical Society Officers Conference in Atlanta in February.

Those attending from Albany included Clarence E. Bridger, President; O. J. Woodard, Vice President; J. Daniel Bateman, Secretary-Treasurer, and Robert D. Waller and Tom Johnson.

The doctors heard talks by Gov. Carl Sanders; Dr. Noah Langdale, Jr., President of Georgia State College; Dr. Ernest Howard, Executive Vice President, American Medical Association, and others.

Samuel L. Raines, M.D., President of the American Urological Association, addressed the GEORGIA MEDICAL SOCIETY February 11 in Savannah. Dr. Raines, Professor of Urology at the University of Tennessee Medical School, Memphis, discussed "Socio-Economic and Educational Problems of Urology."

At the January meeting of the SOUTHWEST GEORGIA MEDICAL SOCIETY the following officers were elected:

Hinton J. Merritt, of Colquitt, President; Warren Baxley of Blakely, Vice President; Robert Jennings, Arlington, Secretary-Treasurer. The board of censors include David Weatherby of Ft. Gaines, James Crowdis of Blakely and Turner W. Rentz of Colquitt.

PERSONALS

First District

HELEN SHARPLEY, Savannah obstetrician, recently attended the American Institute of Hypnosis Seminar held in New Orleans.

The medical staff of St. Joseph's Hospital, Savannah, has elected PETER L. SCARDINO as the new President of its staff. Dr. Scardino succeeds W. B. CRAWFORD, who was elected Chief of General Practice. Others elected were J. LANE REEVES, Vice President; JOHN C. HOWARD, Secretary; ALEXANDER PADEREWSKI, Treasurer; F. T. NICHOLS, Chief of Medicine; JOSEPH J. DOOLAN, Chief of Obstetrics and Gynecology; and WILLIAM H. LIPPITT, Chief of Surgery.

Doctors LOWELL and RUTH THOMAS have moved into their recently completed offices in Rincon. They have carried on a limited practice, using a trailer as an office, for several months.

The office is located on the main street in Rincon, and an open house was held, Sunday, March 1.

Dr. Lowell Thomas is a general practitioner; while Dr. Ruth Thomas specializes in pediatrics.

They have also moved into their new home in Rincon.

Second District

JAMES WALTER MAXWELL, a native of Valdosta and an intern at Phoebe Putney Hospital in Albany, was one of 15 selected to receive the 1964 Wyeth Pediatric Residency Fellowship Award.

EDWIN ADERHOLT, Tifton physician, was named "Outstanding Young Man of the Year" at the Tifton Jaycees' annual "Bosses Night" in February. Dr. Aderholt has served three years on the Tift County Chamber of Commerce Board of Directors, and as president of the Tift County Heart Council. He is Past President of the Cancer Society and is now Vice President of Rotary Club, on the Georgia Heart Council Bureau of Speakers, and is a Deacon in the Tifton First Baptist Church.

Third District

No news submitted.

Fourth District

No news submitted.

Fifth District

EDGAR FINCHER, Professor of Neurosurgery at Emory University Hospital, was the speaker at a meeting of the Ware County Medical Society held February 6 in Waycross. Lumbago-siatica Syndrome was Dr. Fincher's subject.

SIDNEY OLANSKY, Atlanta, traveled to Houston, Texas, on January 16, 1964, where he participated in

the meeting of the Advances in the Study of Venereal Disease and the annual meeting of the American Venereal Association. In these meetings he chaired a panel on the modern management of venereal disease and discussed the Tuskegee study.

On January 23, 1964, Dr. Olansky went to Indianapolis, Indiana, where he gave a lecture to a general practice group on "The Modern Diagnosis and Treatment of Syphilis and Gonorrhea."

On February 14, 1964, as a consultant to the Third U. S. Army, Dr. Olansky visited Fort Campbell, Kentucky, where he lectured to the medical staff on "Serodiagnosis of Syphilis" and inspected the dermatology facilities.

R. C. SCHLANT and J. T. GALAMBOS, Atlanta, have received a grant of $24,933 to develop techniques to outline the large and small blood vessels in the liver. They are members of the faculty of Emory University School of Medicine.

J. D. MARTIN, JR., Atlanta, Chairman of the Department of Surgery in the Emory University School of Medicine, has been elected 1964 President of the Southern Surgical Association.

ROBERT M. FINE, Decatur, delivered a paper, "Straw Itch Mite Dermatitis," to the Dermatology Section of the Southern Medical Association meeting held in November in New Orleans. Among those attending from the DeKalb County Medical Society were BEN OKEL, GEORGE P. SESSIONS, H. DUANE BLAIR, and DAVE L. MORGAN.

BRUCE LOGUE recently addressed the meeting of the Michigan Heart Association in Detroit. The title of his talk was "Management of Cardiac Arrhythmias." He also participated in a symposium for laymen on "The Prevention of Heart Attacks and Strokes."

JOHN D. THOMPSON, Atlanta, spoke to the Charleston County Medical Society, Charleston, S.C., January 14, on "Management of the Adnexal Mass."

JOSEPH R. SWARTWOUT, Atlanta, lectured at the Vanderbilt University School of Medicine on "Fatty Acid Distribution in Lipids of Placenta, Maternal Serum and Fetal Serum," and "Glass Paper Chromatography," January 7, 1964.

Sixth District

No news submitted.

Seventh District

T. EDWARD FLOWERS, a former resident of Rome, has opened offices at 208 Hospital Circle, Rome, specializing in ophthalmology.

T. E. REEVES, JR., and Mrs. Reeves of Carrollton, were in New Orleans in January where Dr. Reeves attended the inaugural meeting of the Floyd W. McRae Surgical Society, of which he is currently President. The society, made up of 25 surgeons in the Atlanta area, were in New Orleans as guests of Dr. Alton Ochsner.

Eighth District

AVERY P. BEALL, Adel, was named Chairman of the staff of Adel Memorial Hospital at the January 31st meeting held in Adel. Other elected officers included EDWARD HOLT, Vice-Chairman, and JAMES C. DISMUKE, Secretary-Treasurer.

F. N. CLEMENTS chaired the staff meeting at which time the 1964 officers were elected and committees appointed. Committee chairmen include Dr. Clements — Credentials; Dr. Dismuke — Sterilization Procedures; Dr. Beall — Tissue.

The late J. ALVIN LEAPHART, SR., of Jesup, owner and operator of Leaphart Hospital, Mayor of the City of Jesup and one of Wayne County's outstanding civic and political leaders, will be honored with a bridge named for him. The Altamaha River Bridge will be known as the J. Alvin Leaphart, Sr., Memorial Bridge.

Ninth District

WILLIAM B. SCHAEFER, Toccoa, has been elected President of the professional medical staff of Stephens County Hospital. He is a surgeon with the Medical Arts Clinic.

Other new officers are SAM H. HAY, Vice President, and ELTON L. COPELAN, re-elected Secretary-Treasurer.

Tenth District

Associate Professor of Surgery, JAMES W. HARKESS of Augusta, spoke in February to the Augusta Civitan Club. Dr. Harkess' topic concerned socialized medicine.

Twenty-nine physicians from seven southeastern states were in Augusta in February attending a postgraduate course on "Obstetric Problems in Private Practice," at the Medical College of Georgia. Coordinator was PRESTON LEA WILDS, of the Georgia medical faculty. Other participating members of the Georgia faculty were FREDERICK P. ZUSPAN, RICHARD TORPIN, C. IVERSON BRYANS, EDUARDO TALLEDO, WILLIAM E. BARFIELD, GEORGE NELSON, DONALD E. O'ROURKE, VICTOR C. VAUGHN, III, and JACK B. MOHNEY.

A book examining medicine in the Bible, *Search The Scriptures,* has recently been written by ROBERT B. GREENBLATT, Professor and Chairman of the Department of Endocrinology of the Medical College of Georgia, Augusta. The book sold 15,000 copies in the first six weeks of publication. J. B. Lippincott Co. is publisher.

CHROMOSOMAL ANALYSIS AVAILABLE

Dr. John T. Godwin, Atlanta, announces the availability of chromatin sex determination and chromosomal analysis. Through a joint effort of the Bioengineering Section, Georgia Tech, and the Cytology Laboratory, Department of Pathology, St. Joseph's Infirmary, a Research Cytotechnologist is now engaged in the study of Cytogenetics.

Physicians having patients upon whom such studies appear indicated such as those with sexual maldevelopment (infertility, primary amenorrhea, abnormalities of genitalia), may obtain information concerning this project by calling Dr. Godwin at JA. 5-4681, Atlanta.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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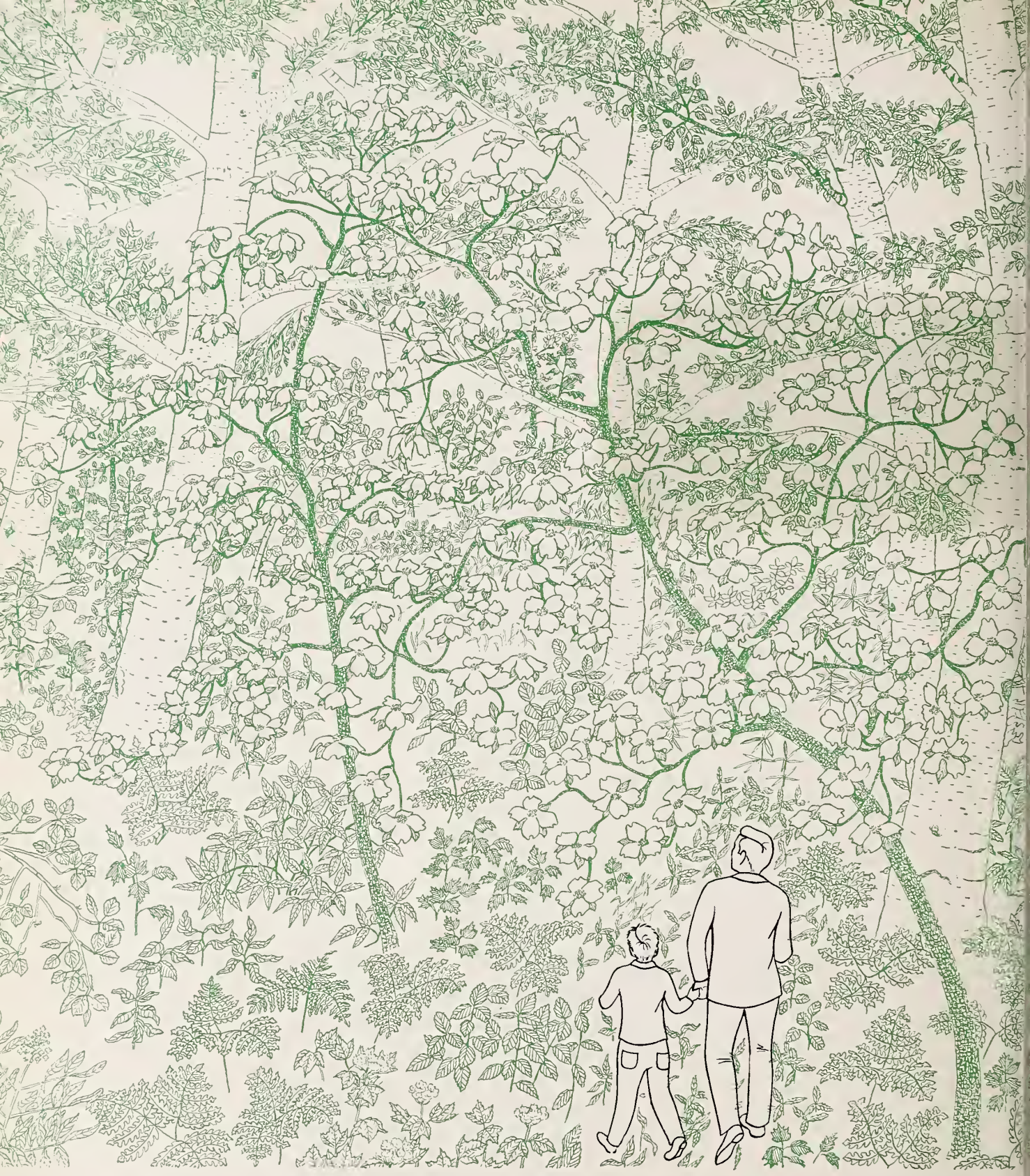
Polio Immunization in Georgia

See page 159



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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

Our Association Future — 1964-65

J. G. McDaniel, M.D., *Atlanta*
President, Medical Association of Georgia

It is my privilege as your incoming President to discuss two problems that should be of great concern to the medical profession.

Some years ago in Atlanta, we had a case of hydrophobia in a human—the first in 20 or 30 years, and the patient died. The City Council immediately ordered all pets penned. Dogs found loose on the streets were impounded — the owner fined. City trucks roamed the streets searching for stray dogs. The innocent citizen must be protected against rabid animals.

Cranberries and Fish

Soon afterward came the cranberry ordeal. Some people became ill from eating cranberries that still had a poisonous spray on them. It cost the growers millions of dollars, whether their cranberries were sprayed with the chemical or not. The United States Government ordered all berries in that area unfit for human consumption. The public must be protected.

And then we had a few deaths from botulism, caused by some type of canned fish not properly heated. These deaths made headlines all over the country. The forces of the industry and government were released to determine the source. The taxpayer must be protected against this preventable disease.

In all these philosophies I heartily agree. There was no reason for the fatalities due to hydrophobia, the poisoned cranberries or the botulism. These deaths totaled some ten or 15 in the entire United States. Those who did not die made a complete recovery.

Here in Georgia, however, we have another preventable disease that was fatal last year to some 1,266 people, and debilitated—some permanently, more than 16,500 persons.

We might call this disease the "Gas Pedal Virus." It lies dormant in many of our citizens in all walks of life. Age is no barrier—it attacks young and old. Physical condition is no bar—it attacks those in perfect health and those with handicaps. This normally quiescent disease becomes explosive when stepping into an automobile. It affects people differently. The majority become euphoric and develop a "hurry syndrome." They have a super compulsion to arrive at their destination in the quickest possible time. These afflicted souls are the ones who straighten out curves, bruise big trees, clip telephone poles, wreck their cars and kill or maim themselves, their passengers, dogs, cats, chickens, children and law abiding citizens along the roadway.

And while the majority become euphoric, there are others in whom the disease manifests itself in an altogether different fashion. These people become overly cautious when stepping into an automobile. They develop a "fear complex," and have an over-compulsion to arrive at their destination safely. Time is no factor. They are the ones who focus their eyes straight ahead and drive near the center of the road at 15 to 20 miles per hour, regardless of the speed limit. They seldom signal their intentions. They unconsciously back up cars for miles on a busy highway. Unfortunately, if some of those impeded cars have a euphoric driver suffering from the "hurry syndrome," then the flint is scratched that lights the fuse of sorrow. Thus the overly cautious driver contributes his share to the mortality and morbidity rate.

The Receiving End

We as physicians are on the receiving end of these tragedies. We see them in the emergency rooms. We know more than any other group in Georgia, the anguish of a mother and father whose son or daughter is killed or maimed in a preventable head-on collision. We are also familiar with the bewildering shock that comes to a child

when a parent is injured beyond hope of recovery.

The public's reaction to this traffic carnage and its concomitant morbidity has always been a puzzle to me. They seem to take it in stride—something like drawing the deuce of clubs when cutting the cards to deal, or saying, "It's just one of those things that happens in these days of hurry." I recently saw a young lady from another state. Her lovely face was permanently scarred, despite many operations by the plastic surgeon. Her dancing days were over because of a crushed knee. The mother's only complaint was that she thought the doctors could have done a better job. No mention was made that the car in which she was riding had been clocked at 90 miles per hour, had turned over and over on a curve and that she hovered between life and death for some ten days—nor did the mother volunteer that two other passengers in the car were killed.

I ask—was this preventable?

But this type of accident is not always the case. Some months ago I knew a family who were leisurely riding down the highway. As they were meeting a truck coming from the opposite direction, a young man pulled out from behind it to pass and struck them head-on. This young man, so the story went, had been involved in nine accidents and in one there was a fatality. Despite this record, he was still driving!

Imagine the Outcry

If a city the size of Griffin, Georgia, had a viral epidemic that during one year attacked every citizen from babies to grandparents and was fatal to about 1,266 people—if the disease permanently crippled many thousands and cost approximately 228 million dollars—can you imagine the outcry of the local and national press, especially if it were preventable. The Red Cross would immediately put on an extra drive. The Salvation Army would more enthusiastically ring their bells. Special funds would be voted by Congress, the politicians would have a field day and the Public Health Department would burn the midnight oil.

None of these things happen, however, because one is killed here, another somewhere else, and not too many at the same time. But it all adds up just the same.

The "gas pedal virus," especially when accompanied by euphoria, can be prevented and treated. The greatest tranquilizer in the world is the sight of a law enforcement officer, or better still, the distinct threat of one in the neighborhood—such as the car he just passed. Some years ago a police officer told me that he could set his motorcycle at a busy intersection and it would take care of traffic all afternoon—he need not even be present.

In Simple Language

In simple language, then, it means we must increase the number of traffic officers in the cities and double the strength of our state highway patrol. We have excellent traffic officers now in the cities and on the highways—just not enough to get the job done. It has been demonstrated time and time again that when an increase is made in the number of traffic enforcement officers, the highway mortality subsides. But as miles of new highways and expressways become operationally coupled with the increase in the number of cars on the road, the deaths and injuries slowly begin increasing again.

And for those who are overly cautious, many times because of some handicap, we should have all drivers 50 years of age and over re-examined every five years prior to issuing a driver's license. Officers in the Driver' License Bureau can spot those with the fear complex. There is no treatment for them unless they have a correctable handicap, or are amenable to driver education.

In all this we must keep in mind, however, that the law enforcement officers are helpless in their efforts at prevention, unless they have a sincere judge to prescribe stronger medicine if the tranquilizers fail.

A Comfort to Know

It is comforting to know that our legislature, in its wisdom, passed a motor inspection vehicle safety law to go into effect in 1965. This law will remove any ancient trucks and autos that limp along our streets and highways and are a menace during the day and especially at night.

Efforts are being made to improve hazards along the streets and highways such as bad curves, narrow bridges, poor signs, etc. I distinctly remember driving along the new highway from Jackson, Georgia, to Macon. I saw a sign 'Caution-Dip', but before I could interpret the sign, driving at 60 miles per hour, I had already encountered the dip. Children and back seat luggage were in a great state of confusion. These things are an important part of the traffic safety picture.

Medical Education

Now the second topic I would like to discuss is medical education.

For some years the public and many physicians have been concerned by the over-specialization of medicine, for which we have been criticized, and sometimes justly so.

Why shouldn't an internist, on a routine physical

examination, be able to do a satisfactory pelvic examination and Pap smear or biopsy if necessary, instead of sending the good lady to a gynecologist? If he finds anything of significance, he can then refer her.

Why can't a pediatrician treat a mother for a cold or sore throat when she brings her child in for the same malady? Certainly he could instruct her to call her own physician if the disease did not progress satisfactorily. There's no reason why she should have to spend hours going to another doctor.

Some months ago I heard a relatively young surgeon say in a rather braggadocio manner that he did not own a "doctor's bag," and that he had an internist check every patient prior to operation and follow him postoperatively.

The Scores

These three illustrations are taken from scores that I could mention. I certainly do not think that the chest surgeon should treat one of his cancer patients for a prostatic problem or a gynecological problem. But I do think that if there was an infected sebaceous cyst behind the ear, he could incise it instead of sending the patient to an ear specialist.

It seems to me that somewhere along the line, we forget that we are doctors to begin with—specialization comes later. We must remember too that the majority of our patients have to "get-off" from work to see us, or employ baby sitters, or travel some distance. It's not only the multiple doctor bills that hurt them—but the time off as well.

Let it be distinctly understood that I am speaking of minor things. Problems or suspected problems should be referred immediately. I would not suggest that a man pose as a specialist and do general practice.

This, of course, is where the G.P. comes in. There is no doubt that he can adequately take care of about 75 per cent of the ills of the general population and can much more intelligently refer problem cases to the proper specialist. A major complaint of patients today is, "We go to a specialist and are sent from specialist to specialist. We do not have a doctor."

Recently at a public medical forum, the subject of headaches was discussed by six representatives of different specialty groups. When it was over, a layman was overheard to say, "If I get a headache, how do I know whom to see."

Rural Areas

The rural areas will always be with us. People of low and moderate incomes will always be with us, and they will comprise some 65 to 75 per cent of the population. They do not need, nor can they finance, nor can they intelligently select, a specialist for every need—and in my opinion, if they try, they get an inferior type of medical care regardless of their financial status.

There has been some discussion about the internist taking over the role of the family doctor . . . that would be wonderful . . . but already they are dividing themselves into cardiology, lung diseases, gastro-intestinal disease, diabetes, allergies, geriatrics, etc.

The general surgeon is gradually becoming passé. The female organs belong to the gynecologist, the urologist wants the hernias, the proctologist the colon, the chest surgeon the diaphragm, the vascular surgeon the veins and arteries. And then there is the thyroid specialist, the ear specialist, the eye specialist —to say nothing of the tonsil surgeon. Only the oncologist remains the truly general surgeon, fully accepted by the profession and lay public alike.

The General Contractor

All I'm saying is that some good doctor has got to be the over-all general contractor in this battle against disease. He should be able to read the architectural blue print of disease as it foments in the temple of health and "farm out" to specialty groups those things that he cannot do well himself. My point is—who is now training the general contractors? We have the plumbers who know all about tubes and flushing and irrigation; the electricians who can pinpoint areas in the brain and who can discuss for hours the QRS and the ST waves; they can light up the bowel and the sinuses; they can visualize the stomach and the arteries; and we have the carpenters with their planes and knives and saws and chisels and nails. We have many skilled subcontractors. All are adept in combating certain diseases or repairing the damages inflicted by the battle in their limited fields. These are the people our medical schools and hospitals pride themselves in training. But we are tending more and more to ignore the pleas of the great majority of the people who ask, "Why can't I have a doctor to take care of most of my sickness, and if I need a specialist then he can direct me?"

It Is Easier

There is no doubt that it is much easier for the hospitals to assign a young doctor to a residency program as soon as possible. By doing this the chief of the specialty develops someone on whom he can depend. Research in this particular field can be carried out, papers are written rehashing the literature, laboratory work and X-rays are ordered by the score, and countless consultations with other residents are held without charge to the patient.

After this has gone on for four to six years, he is then ready to practice medicine in his specialty. He is tremendously important to the profession; we need him badly, but he must settle in a fairly large city. He would starve in a small town.

It is much more difficult to train the general contractor. The young doctor going into this field must first love people. He must also realize that his training is going to be much more difficult and probably take longer than many of the other specialties. The chiefs of the various services must also be sympathetic in teaching him. There's certainly no reason for him to spend a year in research along any line, nor is there any reason for him to spend six to twelve months in pathology. These should be left to the specialist in limited fields and medical school professors. He should be made thoroughly familiar with the most frequent ills and injuries that beset mankind, and their treatment. He should be able to suspect or recognize disease or injury that is beyond his capabilities and intelligently refer them. He is the clinician whose patients benefit from the research in the laboratories of pharmaceutical houses, medical schools, and hospitals.

Training good general practitioners in Georgia and the nation has concerned me for a long time—especially because the trend is toward specialization and the field is becoming narrower and narrower. Now, we even have specialists for the hand only.

This year I plan to have a state meeting composed of representatives of the medical schools, the private and teaching hospitals, the G.P.'s, specialty boards and lay groups. We need to discuss the medical needs in Georgia and cut our cloth to fit the subject.

Earnest Promotion

In conclusion then, I would hope that every doctor and doctor's wife in Georgia would earnestly promote traffic safety, especially to increase the number of our law enforcement officers as it relates to traffic. Let us give moral support to their tranquilizing effect on those who become euphoric from the "gas pedal virus." Where this fails, let us reassure the judge who issues the vinegarish potion that is so beneficial for many of these sick people. May we encourage the highway department to continue to improve the roads, curves, signs and other hazards. A letter to the automobile manufacturers praising some safety device that they have installed, or that they should install, is helpful. We should strive for the passage of a law requiring re-examination for drivers' licenses every five years for people past 50 years of age.

The first year we do these things we can save a minimum of 300 lives in Georgia.

And lastly, some sincere, serious thought must be given to medical education, especially as it pertains to the young physician after he graduates from medical school, and as it interweaves itself with the health and economic status of the average citizen—who, after all, foots the greater portion of the bill for medical education.

1964 CALENDAR OF MEETINGS

State

May 14-16—Contact Lens Seminar for Ophthalmologists and Technicians, The Department of Ophthalmology, 705 Juniper Street, Atlanta.

May 15-16—Georgia Heart Association Annual Meeting, Americana Motor Hotel, Atlanta.

August 9-14—Annual Southeastern School of Alcohol Studies, Center for Continuing Education, University of Georgia, Athens. Contact: *Charles B. Methvin, 1260 Briarcliff Rd., N.E., Atlanta, Ga. 30306.*

May 2-5, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

May 17-22—American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour, Fla.

May 21-23—Eighth Biennial Cardiovascular Seminar, sponsored by the Heart Association of Greater Miami, Carillon Hotel, Miami Beach, Fla.

May 25-27—American Gynecological Society, The Homestead, Hot Springs, Va.

May 28-30—American Ophthalmological Society, The Homestead. Hot Springs, Va.

May 31-June 2—American Medical Women's Association, Roanoke Motel and Motor Inn, Roanoke, Va.

June 18-20—11th Annual Mountain Top Medical Assembly, Waynesville, N. C.

August 20-22—Seventeenth Annual Postgraduate Obstetric-Pediatric Seminar, Daytona Plaza Hotel, Daytona Beach, Fla.

August 24-27—Fourth Inter-American Conference on Toxicology and Occupational Medicine, sponsored by the University of Miami School of Medicine with the cooperation of the University of Puerto Rico School of Medicine, Fountainebleau Hotel, Miami Beach, Fla.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La. Jolla, Calif.

May 22—Symposium on "Clinical Aspects of Acute Leukemia," New York Hilton Hotel, New York.

June 21-25—American Medical Association Annual Meeting, San Francisco, Calif.

June 26 - July 1—Second Hawaii Medical Seminar, Princess Kaiulani Hotel, Honolulu, Hawaii.

August 24-27—Annual Meeting of the American Academy of Physical Medicine and Rehabilitation, Statler-Hilton Hotel, Boston, Mass.

ACCIDENTAL PELVIC PHLEBOGRAM

Earnest M. Curtis, M.D. and Neal H. Newsom, M.D., *Atlanta*

■ ***Following the injection of dye, both the gallbladder and the urinary collecting system were visualized.***

HYSTEROSALPINOGRAPHY is a technique widely and successfully used in the diagnosis and treatment of certain gynecologic disorders. Complications, while not common, have occurred in every sizeable series reported. One of the more common of these has been the entrance of the contrast media into the vascular system of the uterus, and thence into the general circulation. Marshak[1], for instance, in a review of 2,500 cases found this intravisation 38 times, always during the use of water soluble contrast media.

Even more recently, uterine phlebography has been undertaken for diagnostic purposes with excellent visualization in such conditions as myomata uteri and abdominal pregnancy.[2,3]

The purpose of this report is to present an accidental uterine and pelvic phlebogram which, secondarily, also resulted in the visualization of the urinary collecting system and the gall bladder.

Case

GMH #C 131078 — This 31-year-old Negress presented with ten years of involuntary infertility. Prior to that time she had spontaneously aborted on two occasions. No abnormal physical findings were present and the basic laboratory studies were unremarkable.

After routine preparation of the vagina and perineum the cervix was visualized and the uterine cavity sounded to eight cm. A Kidde uterine canula with a flexible polyethylene tip was inserted to a depth of six cm. where a firm connection with the external cervical os was obtained.

Under direct fluoroscopic visualization approximately four ml. of Sinografin* (diatrizoate and iodipamide methylglucamines) was injected. Visualization of the uterine cavity and right fallopian tube was quickly accomplished (Figure 1).

Because of the failure to visualize the left tube, the radiologist encouraged the gynecologic resident to inject more dye. This he did with considerable additional increase in pressure upon the syringe. Suddenly there was a decrease in uterine resistance and 14 ml. more of dye was inadvertently injected.

With this rapid injection there was seen a widespread filling of the vascular channels within the entire uterus and the pelvic venous system, including the uterine and ovarian veins (Figures 2 and 3). Within 30 seconds after injection, the dye had disappeared from the pelvis except for that remaining in the uterine cavity.

A pelvic X-ray taken seven minutes later failed to reveal any dye. Films of the abdomen taken 15 minutes later visualized the upper urinary collecting system, the bladder (Figure 4), and the gall bladder (Figure 5).

Figure 1
Visualization of the uterine cavity and right fallopian tube following injection of four cc. of radiopaque medium.

*E. R. Squibb & Sons.

Figure 2

Immediately after the injection of a total of 18 cc. of dye the entire pelvic drainage is outlined, as well as the opposite tube.

Figure 3

Ten seconds after same injection, even more collecting veins outlined.

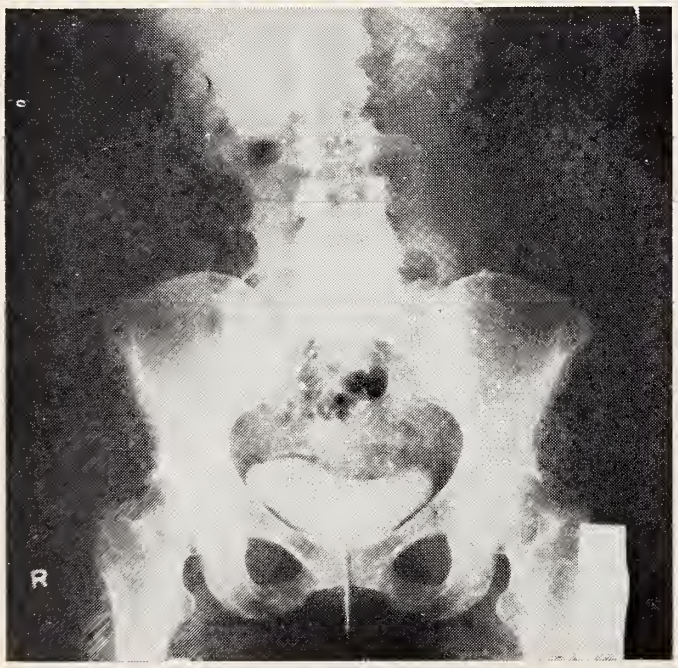

Figure 4

Both urinary collecting system and gall bladder seen 15 minutes later.

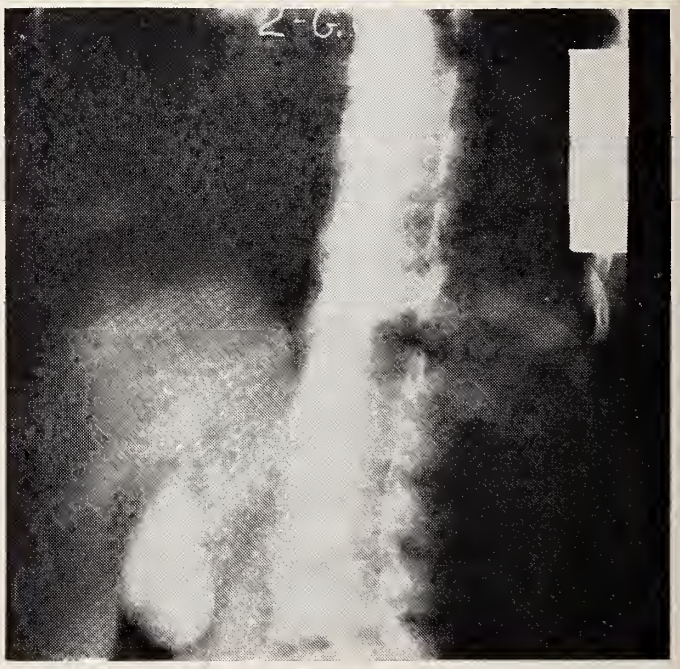

Figure 5

Gall bladder as seen 20 minutes after injection of the dye into the uterine cavity.

The patient suffered no discomfort following the procedure and was discharged one hour later with unchanged vital signs. There was only scant vaginal spotting which quickly cleared. Subsequent tubal insufflation with CO_2 was successful at a pressure of 90 mm. Mercury.

Two interesting questions present themselves in this case: 1. By what route did the contrast medium find its way into so many uterine vessels simultaneously? 2. If the medium passed directly into the vessels under pressure, why did uterine bleeding not follow the occurrence and reduction of this pressure?

To neither of these questions is the answer apparent. It is interesting, however, to note the complete lack of adverse reactions on the part of this patient to this water soluble medium.

This accidental event as well as other well-controlled studies, suggests that the radiographic visualization of the pelvic structures may become even more important in the investigation of gynecologic disease.

1938 Peachtree Road, N.W.

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ON SUSPECTING PORPHYRIA

Scott Patterson, M.D., *Milledgeville*

■ ***The signs and symptoms of this seldom-considered entity are discussed from three points of view.***

QUITE RECENTLY at a social gathering, I noticed a woman who had attractive lines and handsome clothes. This woman in her early thirties had good features and would have been stunning except for the presence of numerous scars on her face and hands. At first glance these scars resembled severe burn scars, but before I could make this observation, another guest who knew this woman well volunteered that she had porphyria, and that while still an infant her family had been advised to keep her in the sunshine as a therapeutic for her then benign-looking skin lesions. The results, 30 years later, serve as a reminder of the progress medicine has made in diagnosing and managing this difficult disorder.

Difficult

The word difficult aptly describes this disorder, particularly as to its pathogenesis, its treatment, and its diagnosis. The subtleties of its pathogenesis and their implications for therapy are still the subject of much research and controversy. What remains for the practitioner of medicine is an awareness of this disorder so that no inept medical intervention need complicate this already difficult management problem. The incidence of porphyria cannot yet be competently estimated because it is classed as a rare disorder, and at this time that means it is rarely considered.

Illustrative Case

Within my brief apprenticeship in medicine I have been closely involved with two patients whose stories illustrate this point. The first patient, about 40 years of age, was received by the medicine service at a nearby teaching hospital and evaluated for abdominal distress. Incident to an EEG, which was being performed the day prior to his scheduled dismissal without an etiological diagnosis, the patient was given some luminal. On return to his room the ward resident was concerned about his acutely psychotic behavior. Because of the need to quiet the man, the resident was late to a teaching session, and upon arrival mentioned the reason for his delay. Fortuitously a sophomore student had just read of porphyria, and *not* yet realizing the "rarity" of this disorder, went by to see the man that evening. The student reviewed the chart, and found no mention of porphyria; he talked with the patient and obtained a typical history of acute intermittent porphyria. He asked the patient for a urine specimen the following morning, and was able to obtain a positive Watson-Schwartz test in the laboratory. These findings were brought to the attention of the ward resident subsequent to the departure of the patient, and were included in the letter to the referring physician.

Another case involved a known porphyric male who after weeks of treatment for his porphyria was transferred in a psychotic condition to a nearby mental institution. It is known to be the policy at this institution for a registered nurse on duty to be able to give "routine" medications including barbiturates at night for disturbed patients. Shortly after this patient arrived at the mental institution he is known to have died. Further details of his demise are not available to me.

Rarity in the Mind

These three cases illustrate the point that the rarity of this disease may yet be in the mind of the physician who examines the porphyric. The multiplicity of diverse manifestations serves to obscure an immediate diagnosis, yet even this multiplicity has a characteristicness which can excite our suspicion. The symptoms of the less common forms will be presented first for completeness although these forms are not now so difficult to diagnose as the more common acute intermittent type of porphyria.

Congenital Porphyria

Congenital porphyria or porphyria erythropoietica makes its appearance quite early in life, usually in infancy. Photosensitivity is the hallmark of this condition with exposure to sunlight causing pro-

nounced blisters. These blisters soon scar and frequently mutilate the patient "with loss of fingers, portions of the nose, ears, scarring of the cheeks and about the mouth, ectropion, or symblepharon."[1] An anemia is usually observed, and the teeth become reddened because of the deposition of the porphyrin pigments. Splenomegaly is common. In this disorder there is no disturbance of the gastro-intestinal system and no nervous system and manifestations.

Porphyria Cutanea Tarda

The cutanea tarda type of porphyria has a characteristic onset after 30 years of age. Lesions are related to photosensitivity, and are quite similar to those described above except multilation is less striking.[1] Again gastro-intestinal and neurologic symptoms are absent.

Mixed Porphyria

The mixed type of porphyria is quite rare and in these few patients abdominal and neurological symptoms have been described coexisting with the cutaneous manifestations.

Acute Intermittent Porphyria

The principal concern of this paper is acute intermittent porphyria, because this form of porphyria appears often enough to concern all practitioners of medicine,[5] and it is this form which is so ubiquitous in its manifestations that porphyrics appear in the offices of virtually the total gamut of medical specialists. Before we are overwhelmed by the multiplicity of presenting symptoms it would be well for us to focus on what Cross[2] has called "the classical triad of pain, paralysis and psychic changes." To capture the magnitude of the problem facing the physician in diagnosing this disorder, the presenting symptoms are catalogued as follows. Patients may present with periodic intense abdominal colic, obstinate constipation or occasional diarrhea, neurotic or psychotic behavior, neuromuscular disturbances, hypertension, or occasionally hirsuitism.[1] Sikes[9] reminds us that patients may present first with a complaint of blood in the urine which turns out to be the maroon urine of the porphyric. Kark[3] adds to this list the presenting symptoms of anginoid attacks, tachycardia and occasionally postural hypotensions. If this list seems innocuous it is because of the breadth of these categories of disturbances.

Gastro-Intestinal Symptoms

The gastro-intestinal symptoms are regarded by Redeker[8] as the most prominent feature of acute intermittent porphyria, even though the abnormal mental behavior may be the earliest recognizable feature of this disorder. Abdominal pain occurs in a patient who usually gives a long history of bowel distress with virtually intractable constipation. The pains are excruciating, poorly localized, and seldom accompanied by rigidity of the abdominal wall musculature. The patient may have mild nausea, but vomiting is rare. Patients will characteristically produce maroon urine during these acute abdominal episodes.[8] Because of the frequency with which these patients have been opened for acute abdomen, Kark[3] includes a picture of the abdomen of a patient in order to emphasize that he regards multiple abdominal surgical scars as typical of the patients for whom he can make a diagnosis of porphyria. That abdominal scarring is typical attests to the frequency with which misdiagnoses occur.

Diagnostic pitfalls are all too frequent, and their credulity is enhanced by a not infrequent rise of the leucocyte count to levels as high as 30,000. Common abdominal diagnoses applied to patients suffering from porphyria are renal colic, acute appendicitis, cholelithiasis, pancreatitis, bowel obstruction,[1] ovarian cyst, ectopic pregnancy,[9] ulcerative colitis.[10]

Neuromuscular Symptoms

The neuromuscular manifestations demand emphasis because of their presence in virtually all cases of porphyria, and the fact that in carefully studied cases the disorder appears first in the guise of various personality changes long before more overt symptoms. Murphey[6] points out that this disorder may be complicated "by almost any conceivable neurological manifestation. Neuritides are frequent (and often permanent) as well as generalized or localized paralysis. Landrey's Syndrome of ascending paralysis may occur. Cerebral manifestations with convulsions, coma, delirium (often violent), or schizophrenic-like syndrome are seen." "The nervous manifestations may be referable to any part of the nervous system, central, peripheral, or autonomic."[11]

The label of hysteric has usually been applied to porphyric patients for years before the symptoms are sufficiently acute to alert the average practitioner of medicine to the existence of "real disease." "The more acute attacks of this disease may be preceded for many years by undue nervousness, neurasthenia or mild hysteria."[11] Frequently the nervous manifestations will predominate, and Markovitz[4] notes that three of the five patients he was able to study were referred to him by psychiatrists. Before this disorder has progressed to diagnosable dimensions, the psychiatric symptoms may include marked hysteria, florid psychosis with active delusional and hallucinatory patterns, even of the Korsakow type, or

manic depressive syndrome. Epileptiform convulsions or grand mal seizures may occupy the center of attention. In longstanding porphyria the cranial nerve involvement may be pronounced with optic atrophy, eye muscle palsies, dysphagia, persistent tachycardia, or hoarseness due to vocal cord weakness. Skeletal muscle paralysis is generally patchy although it may extend to florid quadraplegia. It is usually distinguishable from Landrey's ascending paralysis in that it is not customarily bilateral or symmetrical. The deep tendon reflexes are apt to be hypoactive to absent or occasionally hyperactive with clonus and without knee jerks. In cases with severe neurological involvement, muscle atrophy and contractures may occur. Pains from these symptoms are made worse at night.[11]

Psychiatric Symptoms

The typical patient with porphyria has personality changes which provoke such labels for his personality as those of anxiety, hysteria conversion reaction, depressions, schizophrenia, neurosis, frank psychosis, stupor, coma. Aside from these labels the patients are considered to be quarrelsome and demanding, and overreacting to their abdominal pain. Paredes and Jones[7] have noted such individual reactions as "marked concern over contraceptives, weakness, dizziness, throbbing sensations of the head, or feelings of needles in the skin." Psychological studies instigated by Paredes and Jones[7] netted descriptions of porphyric personality disturbances as those of "affect, depressions, suicide, elation (uncommon), guilt about sin, catatonic, homosexuality, immaturity, phobia, and narcissism. Sometimes the studies even showed evidence of brain involvement."

Understanding the Psychiatric Symptoms

The wealth of descriptions applied to porphyric patients is appalling. But the very breadth of these psychic manifestations becomes the key to their understanding. Kark[3] comments that in "most patients with porphyria, intermittency is the salient feature of the disease." Since we cannot hope to single out psychiatric symptoms as classical as is abdominal pain or obstinate constipation, we can speculate about the dynamics underlying this disturbed behavior. A commonly accepted concept of those psychologically-oriented is that sufficient stress upon the adjustment mechanism of any psyche results in aberrant behavior meaningful only in terms of historical information about that individual's life and development.[12] The psychopathogenic drugs such as LSD have induced psychotic behavior in "normal" subjects; the symptoms manifested during these induced psychotic episodes demonstrate what behavior we might expect of an individual were his adjustment mechanisms to fail. It remains a moot point whether patients demonstrate inappropriate behavior because stress has induced certain organic, i.e. neurohormonal, changes or because this psyche disequilibrium has led to organic changes.

Pertinent to this point is the conclusion of Paredes and Jones[7] following the study of several porphyrics in terms of long-range personality patterns. They conclude, "Each patient apparently reacts in a different way to a more or less similar metabolic disturbance. This may be related at least in part to variations in the severity of the metabolic disturbance, but perhaps of greater importance are the individual's previous personality pattern, life situation, and current psychological stresses."

Nature of Psychic Stress

Because of the diffuse and ever present nature of psychic stress, it is difficult to allude to specific offending circumstances which have been significant in terms of unbalancing the porphyric's adjustment to life, but several cases have been documented which show that during hospitalization, the symptoms of porphyria exacerbated during times of emotional stress. Visher and Knight[10] described a porphyric patient with colitis who had been married several times and who had a long record of maladjustment. She was accepted for long-range psychiatric help at a teaching center, and she was treated with supportive care and psychotherapy directed toward enabling her to withstand her inner tensions. They noted that "towards the end of the patient's hospital course, she could endure quite marked frustrations without excessive diarrhea, and coproporphyrin levels gradually fell in March, April, and May, 1950, with a rise in the middle of April when discharge plans were first seriously discussed. It seemed as if the externalization of hostility reduced the degree of reaction by the porphyrin-production mechanisms." It is interesting that they report a four-year follow-up after cessation of psychotherapy showed no return of symptoms and coproporphyrin excretion levels well within normal range.

Acquaintance with Circumstances

Therefore, it is submitted that the abreactive personality patterns of the porphyric may not be so vague if the local physician is acquainted with the circumstances and "premorbid" personality of the patients with porphyria. And it is the local practitioner who is most likely to have this information available in the most useful form. The onset of acute intermittent porphyria is given as usually from puberty to about 40 years of age. These periods of maturation and adjustment are the most significant in terms of requiring appropriate adaptive behavior.

Exasperation with porphyric patients stems from the use of their symptoms to elicit secondary gains. Family, friends, and physicians become disturbed by this unreasonable behavior. Kark[3] quotes a "very gentle psychiatrist" who was treating one of his female porphyric patients as saying "Her husband must be an angel. How he lives with her I do not know. I think I would have done away with her long ago."

One clue to the separation of the hysteric from the porphyric personality is the fact that the hysterical symptoms do not relieve the tensions and hence, do not provide *La grande belle indifference* for which the conversion reaction is noted. The porphyric patient is resentful, peevish and whining[3] whereas the personality pattern expected of the hysteric "such as anorexia nervosa, globus hystericus, pseudocyesis, and hysterical paralysis . . . is often a passive one."[3]

Another clue to the etiology of unexpected severe porphyric psychic symptoms is their exacerbation after various other types of stimuli "including injuries, surgical procedures, endocrine disturbances . . . and probably most frequently the ingestion of such sedatives as alcohol or barbiturates."[10]

Conclusion

This then is the porphyric. Perhaps the patient we like the least and are the most sure is harboring a multitude of neuroses. The prize for suspecting porphyria is the joy of accurate diagnosis, and the ability to assist a difficult patient and a disturbed family situation. Although no specific therapy has yet been found, conservative supportive management, avoidance of unnecessary operations, and understanding often allow these patients to lead relatively comfortable lives.

Sikes[9] provides a thought which should be remembered for its verity and local reference, "This disease with more faces than Eve should be kept in mind by all practitioners of the healing art since histories in many cases show a multitude of inaccurate diagnoses even covering periods of many years."

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THE COMPLEXITIES OF GENERIC EQUIVALENTS

In many instances the most frequent error made is the assumption that if one places a specific quantity of a given drug in a dosage form, the product will provide the full biologic and therapeutic effects of the drug irrespective of how it is prepared, by whom it is manufactured, by whom it is taken, and when it is taken. The literature indicates specifically that the mere presence of the labeled amount of drug in a given dosage form is no assurance of the therapeutic efficacy of the product. Here the physician must be concerned with the all-important question, "Will all similar products produce the same therapeutic response?" — Jaime N. Delgado, Ph.D. and Frank P. Cosgrove, Ph.D., in *Texas State Journal of Medicine,* October, 1963.

A WORD ABOUT "PROFITLESS DRUGS"

The drug industry contributes a great deal more than we have been willing to talk about in the past. We have hidden behind a so-called ethical approach and we got hurt and badly. Little mention is made of the profitless drugs that the pharmaceutical industry maintains and keeps today for the health of the nation. How many headlines have we seen about the drug for botulism that Lederle keeps in constant supply to take care of an epidemic—with ten cases recorded in the United States in the year 1962? I have not seen this put in the *Congressional Record.* — Philip B. Hofmann, Chairman of the Board, Johnson & Johnson, to National Association of Chain Drug Stores, Washington, D.C., October 17, 1963.

DELAYED APPEARANCE OF TRAUMATIC ARTERIOVENOUS FISTULA

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■ ***Continued suspicion of this development should be maintained even though surgical exploration is carried out at the time of injury.***

Arterial and/or venous reconstruction is now generally accepted as the treatment of choice for significant vascular injuries. This change from treatment by ligation was given impetus by the reports of Jahnke and Howard[5], Spencer and Grewe[10], and Hughes and Jahnke[3], and the description by Hughes[2] of the marked drop in amputation rate in cases of acute arterial injury of the extremities during the Korean War. Immediate direct surgical repair, with or without grafting procedures, was responsible for this improvement.

Our purpose is to demonstrate that an arteriovenous fistula may appear after such an injury, sometimes even though the management of these cases is aggressive and a high index of suspicion of vascular injury is maintained. Three illustrative cases are presented and discussed.

Case One

A 45-year-old man was admitted to Saint Vincent Charity Hospital, Cleveland, Ohio, on January 10, 1959, after receiving two small caliber pistol wounds in the left lower extremity. One bullet entered the thigh medially and exited just below the knee laterally; the other entered at the junction of the middle and lower thirds of the leg posteriorly and exited anteriorly just above this level. There were open cominuted fractures of the tibia and fibula.

The patient was treated by operative debridement and internal screw fixation of the tibia, and a plaster cast. Two days later, the color and warmth of the toes were described as good.

After discharge, the patient was followed in the Out-Patient Department. After removal of the cast he complained of inability to dorsiflex his left foot. Neurologic examination disclosed paralysis of the peroneal nerve. He was re-admitted for exploration of the sciatic and peroneal nerves, with a pre-operative diagnosis of peripheral nerve compression. At operation on August 17, 1959, a pulsatile mass was identified in the popliteal space compressing the peroneal nerve which was otherwise intact. The vascular surgery service was requested to continue the operative procedure. A traumatic arteriovenous aneurysm was identified and was repaired by resection of the popliteal artery at the point of origin, removal of the aneurysmal sac with end-to-end arterial reconstruction, and lateral suture of the popliteal vein.

Following operation the vascular system of the leg returned to normal, and a chest X-ray taken eight days later revealed return to normal of heart size and silhouette (Figure 1) when compared with the chest X-ray taken on admission to the hospital. The peroneal palsy remained and the patient was later readmitted for ankle arthrodesis, with the circulation of the leg normal.

Comment

An evaluation of the circulation should have been recorded on the first admission. Had there been evidence, as seems likely, of impaired arterial function, exploration of the femoral and popliteal arteries at the time of open reduction should have been entertained. The resultant peroneal palsy and reconstructive orthopedic surgery might thus have been

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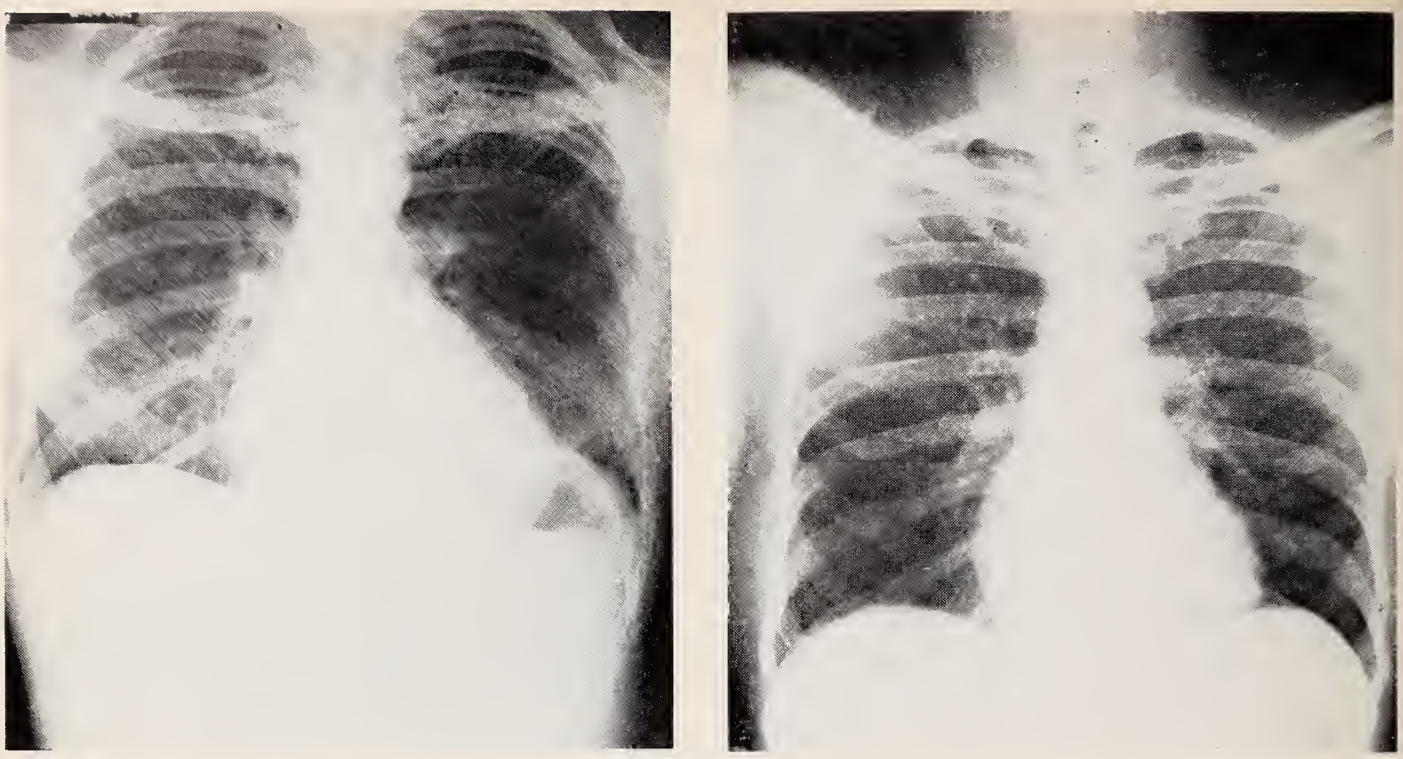

Figure 1
Case One. Decrease in heart size following repair of arteriovenous fistula. (a) Pre-operative. (b) Postoperative

avoided. Continued suspicion of the possibility of delayed development of an arteriovenous fistula, with careful examination of the popliteal space and the popliteal artery itself, in addition to neurologic examination, would have provided the necessary pre-operative diagnosis on the second admission, as illustrated in Case Two (v.i.). It might be noted here that holding the examining hand motionless for a few seconds will improve detection of the normal popliteal pulse as well as of abnormalities.

Case Two

A 34-year-old police officer was admitted to St. Vincent Charity Hospital on July 6, 1962, having received a shotgun charge at close range in the right upper extremity. This injury was received when he halted an armed robbery in progress at a financial institution. There was a massive wound of entrance three inches in diameter on the medial surface of the right upper extremity over the course of the brachial artery and vein and the median nerve, with multiple pellet wounds surrounding this. The shotgun wad was removed in the emergency room and compression applied to the wound. The pulse in the right radial artery was absent on admission, and after resuscitation with whole blood, the patient was taken to the operating room where a thorough debridement and exploration was carried out.

An incision was made just below the axilla for proximal arterial control. A large amount of the biceps brachii muscle had been devitalized and was excised. The brachial artery and vein were dissected out over a distance of several inches in search of direct injury. The areolar tissue surrounding the neuro-vascular bundle was infiltrated with hematoma, but a careful search revealed no evidence of laceration or fresh hemorrhage from the major vessels. The nerve was found intact. Pulsations in the artery were entirely normal, and there were no palpable thrills. The wound was dressed open, and a delayed primary closure by means of split skin graft was performed five days later.

During the postoperative period a faint thrill became palpable above the skin graft. The differential diagnosis entertained at this time was stenosis due to scar contracture with resultant thrill, or arteriovenous fistula, missed at the operative exploration or developing subsequently.

Two months later the thrill was more pronounced with a loud bruit in this area transmitted down over the course of the brachial artery. The arm remained larger than the left. The right radial pulse was intact and of good quality. At this time Branham's sign (immediate bradycardia following occlusion of the fistula) was elicited by compression of the brachial artery, and the patient was readmitted on October 23, 1962. Subclavian-brachial arteriography confirmed the pre-admission diagnosis of traumatic arteriovenous fistula (Figure 2).

On October 30, 1962, three separate fistulae between the brachial artery and the brachial venous system were identified. Two of these arose from the brachial artery itself and were treated by resection and end-to-end anastomosis, and the third arose from a large branch of the brachial artery which was treated by ligation and resection. The venous con-

nections were treated by lateral suture and maintenance of continuity.

Postoperatively the heart size reduced from 16.5 over 31 centimeters to 14.2 over 31 centimeters. The residual edema of the arm rapidly cleared, and the arterial pulse at the wrist was easily palpable and of good quality. There was no venous distension, and there was no bruit audible nor thrill palpable in the region of the injury and operations. The patient has regained most of the function of the arm and hand which had been lost as a result of the loss in muscle mass and contusion injury of the median nerve.

Comment

Continued awareness of the possibility of an arteriovenous fistula developing, even after a careful search for arterial injury had proved fruitless, led to the proper diagnosis. The compensatory cardiovascular phenomena known to occur in this condition had begun but were minimal, and were reversed by repair. The cardiac enlargement in this case was not as great in Case One, due in part to a shorter interval following formation of the fistula.

Case Three

A 26-year-old man was admitted to St. Vincent Charity Hospital on December 23, 1962, having been shot in the neck and left thigh by a store owner during an attempted burglary. The neck wound of entrance was at the left angle of the mandible and the exit was at the right mandibular angle. In the thigh the entrance was just below the gluteal fold and the exit in the anteromedial lower thigh. Immediately upon admission to the emergency department the pulses in the left lower extremity below the point of exit of the bullet were absent. Shortly thereafter they again became palpable. Because of the nature of the injury, as well as the knowledge that pulses may reappear after direct laceration of vessels, the thigh was explored.

At operation, injuries of the superficial femoral artery and vein were identified, with devitalization of the adjoining walls of the respective vessels. There was disruption of the intimal and medial layers of the artery with the overlying adventitia intact. The artery pulsated normally and the distal pulsations were easily palpable. The damaged portion of the artery was resected with repair by end-to-end anastomosis. Approximately four centimeters of the vessel were excised because of the known damage to arteries for some distance above and below the point of concussion in this type of injury[8]. Because of the presence of two large veins in the subsartorial canal, each of which was more than one centimeter in diameter, only one of which was injured, an attempt at repair of this vessel was not made. The vein was simply ligated and the remaining channel considered adequate for venous return.

In the early postoperative period there was no evidence of edema, and there was normal distal arterial blood flow. No vital structures had been damaged in the neck, and the wounds were treated open. Three days after operation the patient was transferred to the prison ward of the county hospital.

Comment

Without immediate exploration and repair, this injury would have resulted in the "delayed" appearance of an arteriovenous fistula, as occurred in Cases One and Two. The clinical signs observed here are frequently, often erroneously, attributed to spasm.

Discussion

Arterial and venous injuries which may result in the formation of an arteriovenous fistula may be due to penetrating or nonpenetrating trauma. Blunt trauma can lacerate a vessel, or may result in devitalization of vascular structures with delayed rupture and formation of a fistulous communication. Vascular injuries may accompany either closed or open fractures[9]. Of the penetrating injuries, the most common are stab and gunshot wounds[7,9]. Although arterial injuries are uncommon in civilian practice, they occur often enough to merit consideration. Every physician who treats injured patients should be aware of this possibility, and diagnostic suspicion must carry through the follow-up period of observation.

Figure 2

Case Two. Immediate filling of brachial and axillary veins on arteriogram. Note retained shotgun pellets, and multiple vascular channels medial to humeral shaft.

It is perhaps trite but necessary to state that this type of injury must be suspected if the diagnosis is to be made. Any injury, particularly in an extremity or in the groin or axilla, which is in the region of a major neurovascular bundle should alert the examining and treating physician to the possibility of an arterial or arteriovenous injury. Certainly where the diagnosis is firmly established, and also in those patients in whom the diagnosis is seriously considered, operative exploration is indicated. It is pertinent, however, to point out that the diagnosis of spasm without concomitant partial or complete division of a major artery must be viewed with suspicion, since this type of injury is not common. Many patients who have a transient absence of arterial pulsation do in fact have a partial or complete division of a major arterial trunk. For this reason exploration is indicated as in our Case Three.

Not Necessary

Angiography is usually not necessary in the presence of acute injury since physical findings alone are adequate for diagnosis in most instances. Where there is doubt, it should be performed immediately. The details of repair have been amply demonstrated[6,7] and need not be discussed in detail. The preferred method of repairing arteriovenous fistula is resection of the damaged portion of the artery with end-to-end anastomosis without graft if possible, or with interposed reversed autogenous vein graft[4] if much arterial substance has been lost and the artery cannot be repaired without undue tension. Lateral suture of the vein completes the repair. Quadruple ligation is an inadequate method but may be necessary under existing conditions in any given patient. Autogenous tissues are to be preferred rather than prostheses, since the former can be expected to give better long term patency rates[1].

Summary

1. Three cases of arteriovenous injury are presented and discussed.
2. Two demonstrate the delayed appearance of arteriovenous fistula, one in spite of thorough operative search for such an injury at the time of original treatment.
3. The third patient demonstrates the frequent need for exploration even in the presence of palpable distal pulses, in order to prevent the development of such a fistula.
4. A plea is made for continued suspicion of the presence of such an injury, even though exploration has been carried out in the management of acute vascular injury.

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FUTURE DRUGS WILL BE MORE SPECIFIC

What about future drugs? They will be more specific. They will isolate diseased tissues with the precision of the surgeon's scalpel. They will act on tissues in ways not yet even tried. . . . The drugs of the future will be more potent in some instances, less drastic in others. Some will be given by special techniques; for example, with the aid of an automatic gadget strapped to the body to permit the release of regulated doses determined by body reaction to a disease or to situations of stress. In other cases, the drugs will be administered on the basis of data accumulated and interpreted by electronic impulse. —Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, in *New Medical Materia,* April, 1963.

"A FIGHTING CHANCE" FOR THE MENTAL PATIENT

Anxiety, psychotic symptoms, and abnormal behavior can be controlled to a large degree by chemotherapy. Once this is accomplished, the patient often makes relatively few demands and does not require large amounts of your time. . . . Drugs can control anxiety and psychotic symptoms but to my knowledge do not alter basic personality structure nor change patterns of coping with distress. Drugs enable the patient to get out of the hospital and give him a fighting chance to live in reasonable comfort at home with family, friends, and co-workers.—Leonard T. Maholick, M.D., Medical Director, The Bradley Center, Inc., Columbus, Ga., to American Academy of General Practice, Chicago, April 1, 1963.

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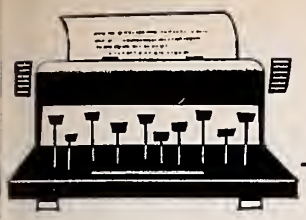
Melcher, Carl W.	5260 St. Marys Road Columbus, Georgia	Active	Muscogee
Messer, Alfred A.	Emory University Clinic Atlanta, Georgia 30322	Active	Fulton
Morgan, James W.	490 Peachtree Street, N.E. Atlanta, Georgia 30309	Active	Fulton
Morris, Archie J.	Montezuma, Georgia	Active	Sumter

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA (Continued)

Name	*Address*	*Classification*	*County Society*
Nelson, Fred L., Jr.	9 Medical Arts Center Savannah, Georgia	Active	Georgia Medical Society
Nichols, Evans J.	513 Campbell Hill Street Marietta, Georgia	Active	Cobb
Nolan, Thomas R.	1938 Peachtree Road, N.W. Atlanta, Georgia 30309	Active	Fulton
O'Rourke, Donald Eugene	Eugene Talmadge Memorial Hospital Augusta, Georgia	Active	Richmond
Raines, Jack A.	1327 Warren Williams Road Columbus, Georgia	Active	Muscogee
Ramos, Harold S.	35 Linden Avenue, N.E. Atlanta, Georgia 30308	Active	Fulton
Roberts, John M.	340 Boulevard, N.E. Atlanta, Georgia 30312	Active	Fulton
Schwartz, James F.	69 Butler Street, S.E. Atlanta, Georgia 30303	Active	Fulton
Sessions, Robert T.	1323 Church Street Marietta, Georgia	Active	Cobb
Shelton, Lee R.	250 Auburn Avenue, N.E. Atlanta, Georgia 30303	Active	Fulton
Smith, Darius A.	Medical Building Dallas, Georgia	Active	Cobb
Smith, Edgar Benton	Martin Army Hospital Fort Benning, Georgia	Service	Muscogee
Smith, Theodore G.	542 Church Street Decatur, Georgia	Active	DeKalb
Smith, William P., Jr.	401 Peachtree Street, N.E. Atlanta, Georgia 30308	Active	Fulton
Stewart, Donald M.	229 Doctors Building Columbus, Georgia	Active	Muscogee
Stubbs, Joe C.	Martin Army Hospital Fort Benning, Georgia	Service	Muscogee
Sturkie, Thomas O.	1416 Cherokee Street Marietta, Georgia	Active	Cobb
Su, Cheng-Tsuau	2515 Habersham Street Savannah, Georgia	Active	Georgia Medical Society
Sutlive, William G.	120 E. 34th Street Savannah, Georgia	Active	Georgia Medical Society
Temples, Powell M., Jr.	Emory University Clinic Atlanta, Georgia 30322	Active	Fulton
Tiliacos, John N.	104 Beverly Hills Drive Marietta, Georgia	Active	Cobb
Tornow, Abraham A.	441 W. Peachtree Street, N.E. Atlanta, Georgia 30308	Service	Fulton
Tucker, John A.	144 Ponce de Leon Avenue, N.E. Atlanta, Georgia 30308	Active	Fulton
Ullman, Karl H.	1692 Dorsey Avenue East Point, Georgia	Active	Fulton
Vannix, Robert S.	771 Virginia Avenue Hapeville, Georgia	Active	Fulton
Webster, Robert M.	5 Lee Street Newnan, Georgia	Active	Coweta
White, James Bruce	P.O. Box 7 Tallulah Falls, Georgia	Active	Habersham
Yobs, Anne Roof	1600 Clifton Road, N.E. Atlanta, Georgia 30333	Active	Fulton



EDITORIALS

Polio Immunization and You

It is rare indeed that the average physician is given the opportunity to participate *first hand* in the eradication of a widespread, serious disease. Such an opportunity is now ours in the case of the dread disease Poliomyelitis. Indeed, it is more than an opportunity, it is an obligation. It is our responsibility to take the necessary steps to insure that our communities are never again subjected to the distressing consequences of this crippling disease which was so common just a few short years ago.

The Need

Poliomyelitis is still a problem, even though widespread use of the Salk Vaccine has effected a tremendous reduction in the annual incidence of this disease. The greatest single problem in this connection is the lack of immunization that still exists. According to the United States Public Health Service, considering only the most susceptible age group —those under 40 years—there are over 81 million people who have not had the recommended four shots, and almost 30 million who have not had even one shot of Salk Vaccine. This latter group is concentrated in the so-called slum areas and in poor farming sections. These are now the chief victims and the hardest hit are their small children. In addition to this distressing lack of immunization, another factor is quite important. Fifteen to 20 per cent of the cases of Paralytic Poliomyelitis that have been reported during the past year have occurred in individuals who have had three or more injections of Salk Vaccine.

This situation of inadequate immunity can be expected to grow worse as time goes by and people become more complacent concerning the threat of Poliomyelitis. From the consequences of such complacency arise the threats of future epidemics.

The Answer

Community-wide mass immunization programs, utilizing Oral Poliovirus (Sabin) Vaccine, offer the best opportunity of eradicating this health threat. There can be no doubt that a far greater percentage of a community's population can be reached in this way, as compared to relying on the efforts of individual physicians to immunize those seen in their own practice. The very groups that cause the greatest concern are the groups that will not be reached by any means short of an all-out community effort.

The Oral Vaccine is easy to dispense rapidly to large numbers of people and no injections are required. In addition to producing prolonged immunity (possibly a lifetime), it inhibits intestinal growth of the virus later and transmission to another person is thereby prevented. This is an advantage Salk Vaccine does not possess.

Generally speaking, the programs of this nature that have enjoyed the greatest success, are those that have been originated and conducted by the physicians of the area. It seems reasonable to organize these campaigns around the local medical society, and thereby avoid an excess of overlapping of effort that would be present if each city or town undertook its own program. In addition, this offers us an excellent opportunity to demonstrate to the public what private medicine can accomplish on its own, without aid or interference from a Federal Agency.

Organizing a Campaign

Take time to plan your program well. The pharmaceutical company, from whom the vaccine is purchased, can supply you with the details and necessary help to plan and conduct a successful program.

Solicit the aid of as many individuals and organizations as possible. The greater the community participation, the better are the chances for a success.

Publicize the program extensively. You should saturate the area with all the details necessary to secure the community's understanding and cooperation. Remember, only the spoken word will reach into certain areas of some populations.

Don't forget the special effort needed to reach the problem groups adequately. While adults of all ages should be encouraged to take the Vaccine, the most urgent need is to reach the pre-school and school age children.

It's Up to Us

Over one half of the counties in Georgia have completed oral immunization programs or are in the process of conducting one now. It is up to the rest of us to see that our counties are given the chance to . . . *STOP POLIO*. Georgia is well on the way toward 100 per cent coverage. Let's finish the job.

Remember, there is no *cure* for polio . . . but . . . it can be prevented.

John T. Yauger, M.D.

Where Angels Fear to Tread

NEWS NOTE: The American Medical Political Action Committee (AMPAC) held the first of a series of regional workshop conferences in Atlanta on March 21-22. This political conference on "how to win" was well attended by physicians and their wives representing state political action committees from throughout the Southeastern States.

In six short months the nation will go to the polls to elect a third of the membership of the U. S. Senate, the entire House of Representatives and a President. The political complexion of the government will be determined for some time to come as the result of these elections.

What will that complexion be, and what, if anything, do you plan to do to influence the outcome of these elections. Vote? To be certain, but so will everyone else. Study the issues and the candidates? That is a good start, but it is only a start.

The Real Question

The real question is not determining whom you will favor with your vote and then casting your ballot on election day. The question is, what do you plan to do in behalf of better government prior to this time.

As a doctor of medicine and more importantly as a responsible citizen with a clear cut obligation to give of your time, talent and money for good representative government, your stake in the outcome of these elections must be painfully obvious to the most casual onlooker.

Full Weight

Were any of your patients racked with as many problems as is our Federal government you would not hesitate to throw yourself full weight into the solution of these problems. In a more meaningful sense your most important patient, the United States, has problems in desperate need of solution. The solution will not be found in indifference to the election of the men you choose to solve these problems. The caliber of the representatives you elect will determine whether the patient gets well or not.

General of the Army, Douglas MacArthur, once stated to a Joint Session of the Congress that "in war there is no substitute for victory." Though he was speaking in a military context, his words are not without meaning in a political sense. But victory in politics like victory in war does not come with all prepared troups or a half organized battle plan. Preparation through organization serves both causes well and is, in fact, indispensable to victory.

GaMPAC

It is precisely because organization is so vital to success that the Georgia Medical Political Action Committee offers the best and, most likely, the only hope for the medical profession and its friends to be truly effective in political action.

Individualism is a necessary and cherished characteristic of a doctor of medicine. But in politics it is simply inadequate in the face of organized electioneering practices. In short, to be effective, your individualism must be amplified a hundred times if your voice is to be audible above the herd. Organization is the only answer and GaMPAC was formed for this very purpose.

The existence of GaMPAC as an organization does not guarantee success. However, it can be safely said that without GaMPAC we can certainly guarantee failure. GaMPAC is merely a mechanism and as such must be well-financed and intelligently directed. It must have a broad based membership and above all it must have a political war chest equal to the task.

Both essentials, money and manpower, must be accompanied by a sense of mission on the part of the membership, for political success does not go to the faint of heart, the timid or those who hesitate at the moment of decision. Rather political effectiveness, and hence political success, belongs to those bold enough to be decisive, concerned enough to pay the price in time and money and sophisticated enough to distinguish between the *ability* to win and the mere *desire* to win. GaMPAC has the boldness and the sophistication, but only you can supply the money through membership dues. There is no other way.

Academic Judgment

The medical profession is no longer concerned with an academic judgment on the virtue or lack of virtue in political action. It is concerned with, and faced with, a problem as real as the headlines on the morning following election day. We have talked for a year and a half. Now is the time to show our real colors.

MAG urges you to identify yourself with GaMPAC and to participate in it as a dues paying member. MAG has given its solid, unqualified endorsement to this organization. The decision is yours, but the answer will affect us all.

In San Francisco

If vocalist Tony Bennett's version of "I Left My Heart In San Francisco" makes you yearn to see just what it's all about for yourself, the American Medical Association is this year giving you the perfect excuse. June 21-25 are the dates designated for the 113th Annual Meeting of the AMA—in San Francisco.

Since the last annual meeting there six years ago, the city has increased its accommodations to handle the 15,000 to 16,000 crowd of physicians expected to attend the meeting; the civic auditorium has been remodeled, and the program agenda promises to be better than ever.

In Store

Some very interesting things are in store for those attending this year. Pertinent subjects for the general scientific meetings include Differential Diagnosis of the Liver and Pancreas, Hyperbaric Oxygen Phenomena, Computers in Medicine, Autoimmune Mechanisms and Disease, Cardiovascular Opacification, and Tumors of the Endocrine Function. In addition, a special half-day program on various aspects of heart disease will be offered by the American College of Cardiology and the American Heart Association. The popular and interesting Research Forum program will be offered again; 60 papers based on new and original work being done in the nation's medical schools will be delivered by young, outstanding researchers.

What is happening, scientifically, in the strange new world of hyperbaric oxygenation—the science of administering oxygen to patients at supra-atmospheric pressure—will be explored. The techniques of treating patients in high pressure chambers will be covered at a half-day symposium, Wednesday, June 24.

The computer's role in detecting, amplifying, measuring, analyzing, correlating, communicating, controlling, and forecasting the manifestations of the human organism will be investigated on Thursday, June 25, when "Computers in Medicine" will be the subject of the day. The computer was selected as a subject, says the chairman of this program, because every medical researcher, physician, clinic and hospital has been struggling for some time with mountains of data requiring classification, analysis, and storage.

Accolades

AMA will be handing out some accolades too—this year, to 95-year-old Columbus, Ohio, physician, Herbert Morris Platter, will go the Certificate of Merit. Dr. Platter was Secretary of the Committee on Arrangements for the AMA meeting in Columbus in 1899. In that capacity, he secured space for the first AMA Scientific Exhibit.

John McK. Mitchell of Rosemont, Pennsylvania, will be honored as the 1964 recipient of the Abraham Jacobi Award, which carries an honorarium of $1,000, made possible through the Section on Pediatrics, and given to an American pediatrician selected for outstanding contributions to the field of pediatrics.

All of the 31 Specialty Sections are formulating interesting and educational programs. Subjects include toxicants and insecticides, chronic ulcerative colitis, psychiatry in general practice, gynecology for the general practitioner, ecology to closed environments (submarines and space craft), basic courses in hand surgery and common foot problems, prosthetics, differential diagnosis of the liver and pancreas, management of lower extremity amputees in the light of recent research, procedures for the treatment of anorectal diseases, and contamination and infection of the bladder and kidney.

And last but not least, for the art lover, there will be an exhibition of paintings sponsored by the American Physicians' Art Association.

Something for everyone, as the barker would say, awaits the doctor who spends June 21-25 at the 113th Annual Meeting of the American Medical Association in San Francisco!

HEALTH POSTERS, FRAME OFFERED BY AMA

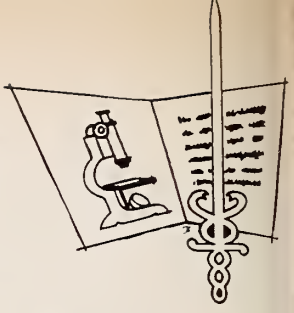
A set of 12 health posters and a 19½ x 24-inch display frame are available from the American Medical Association.

The posters are designed for placement in reception rooms, hospitals, libraries, banks, stores, airports and other public places, and a card at the bottom of the frame identifies them as "Sponsored by the Physicians of Your Community."

Topics covered in the four-color posters are driver fitness, colds, nutrition, auto seat belts, immunization, physical examinations, obesity, hearing and vision, poison prevention, exercise, suntanning, and health careers.

Cost of the posters and frame is $8.95 postpaid. They are available from the Order Dept., AMA, 535 N. Dearborn, Chicago 10, Illinois.

Reprinted from the AMA News, July 8, 1963.



CANCER: A RESEARCH PROGRESS REPORT

Mr. Warren Hites, *Augusta*

An optimistic note regarding prevention and cure of cancer came from the Sixth Annual Science Writers' Seminar at Palm Beach Shores, Florida, this Spring.

More than 60 researchers and medical doctors addressed the gathering of leading writers from throughout the nation to discuss advances in treatment and research and to analyze the many puzzling areas.

Divergent Paths

Their reports point up the divergent paths of investigation now being pursued in the fight against cancer. Virtually all the biological and behavioral disciplines from A to Z—allergy to zoology—are at work on this problem.

One of the reporting scientists gave this list as definitive of the sciences involved in the search and work.

AUTOBIOTICS—Studies of body-produced substances that may provide immunity from cancer. Synthesis of these substances from various sources may lead to anti-cancer drugs;

CHEMOTHERAPY—One research group reports leukemia patients participating in a cooperative drug-testing study with temporary remissions of the disease brought on by combinations of the test drugs;

CYTOCHEMISTRY — Varying proportions of nucleic acids and protein are being studied for clues that may reveal the evolution of cancerous cells;

ELECTROMAGNETISM—Magnetic fields affect delicate equilibria both inside and outside cells. The magnetic sensitivity of cancer cells is being investigated;

GENETICS—Certain genes in the genetic molecule are being considered which may possibly determine cancerous tendencies;

HORMONES—Work is underway in the therapeutic use of hormones in the treatment of breast cancer, but as yet it is still expensive and not completely reliable;

LASERS—High energy light beams are being employed in the laboratory to irradiate certain forms of cancer with some success;

RADIOLOGY—Diagnostic and therapeutic uses of rays and isotopes are under continued study. An exciting new development is Themography;

TRANSPLANTATION—Research continues in the field of replacing cancerous organs with transplants. Homografts and heterografts are being done experimentally;

VIRUSES—Certain investigated types are known to cause cancer in animals and are believed to do the same in humans.

Reporting on the "thermograph" as a diagnostic mechanism which is extremely sensitive to heat, Dr. Jacob Gershon-Cohen, Director of the Department of Radiology at Albert Einstein Medical Center, Philadelphia, said it had the ability to record elevated skin temperature at the site of cancer lesions.

Change in Attitude

Dr. Steven O. Schwartz, Director of the Department of Hematology at Hektoen Institute for Medical Research in Chicago, reported on the promising field of virology as it is related to leukemia and what he called a "radical change in the attitude toward the acceptance of the role of viruses in leukemia."

He said his group had become convinced that leukemia was a disease of infectious origin, and began considering the long range problem of treatment and prevention. The question of the ability of the body to develop protective antibodies consequently came under consideration.

"In view of the evidence that leukemia is virus caused, and the fact that man is able to produce antibodies," Dr. Schwartz reported, "it is logical to foresee the time when this form of cancer will be either prevented or its treatment radically altered."

Research War

The research war against cancer was supported last year by more than $13,382,000 from the American Cancer Society in 476 grants. There were 78 institutional grants, 72 personal grants, and 326 grants in the areas of etiology, pathogenesis, and therapy.

The ultimate solution of the cancer problem lies in the nationwide effort involving government as well as private medical, educational and research institutions, and it will be found. This is the hope that scientific investigators reported at the annual research seminar.

Mr. Hites is Assistant to the President, Medical College of Georgia, Augusta.

From the American Cancer Society's Annual Science Writers' Seminar.

Approved by the Professional Education Committee, Georgia Division, ACS.

TUBERCULOUS PERICARDITIS

Charles B. Upshaw, Jr., M.D., *Atlanta*

Tuberculous pericarditis is an uncommon disease yet an important one for the doctor to recognize because proper treatment may alter the disease's course favorably. The causative organism is mycobacterium tuberculosis which induces an inflammatory response in both layers of the pericardium and usually in the adjacent epicardium. Commonly there is extensive caseation, and, with chronicity, the pericardium becomes progressively thickened. Adhesions develop between the two layers of the pericardium and not uncommonly the pericardial fluid is loculated. The pericarditis results from an extension of tuberculosis from adjacent structures such as lungs, pleura, mediastinal lymph nodes and bone. A large amount of straw-colored pericardial fluid is usually present; sometimes this is blood tinged or hemorrhagic but rarely is it purulent. The tubercle bacilli may be demonstrated by culture of the pericardial fluid or by guinea pig inoculation.

Affects the Negro

The disease affects the Negro more frequently than other races. Like other forms of tuberculosis, its onset is insidious. The symptoms of a systemic illness may be present including: malaise, fatigue, weakness, anorexia, weight loss, fever and anemia. The pericardial effusion or the thickened scarred pericardium will cause cardiac tamponade of variable severity. The pressure on the heart interferes with the diastolic filling of the left and the right ventricles leading to a diminished stroke volume. Furthermore, in chronic restrictive pericarditis, myocardial atrophy and fibrosis is present causing myocardial failure. These abnormalities of the pericardium and myocardium induce a number of symptoms and signs: dyspnea, cough, orthopnea, chest pain, hepatomegaly, "paradoxical pulse," neck venous distention, ascites, ankle edema, lowered pulse pressure, tachycardia, distant heart sounds, enlarged area of cardiac dullness, pericardial friction rub and a loud protodiastolic extra sound (the so-called "pericardial knock"). Systemic arterial hypertension is notable by its absence.

The diagnosis depends on the discovery of active tuberculosis elsewhere and the presence of positive culture (or positive guinea pig inoculation) of the pericardial fluid, usually obtained by pericardial paracentesis. Signs of pericarditis due to any cause include the following: circulation time (arm-to-tongue) is prolonged, the venous pressure is elevated, the cardiac silhouette is enlarged on chest X-ray examination, and the electrocardiogram shows low voltage of the QRS complex and/or inverted T wave in the limb and precordial leads. In some cases where the diagnosis is not certain, an exploratory thoracotomy and pericardiotomy may be necessary.

The medical treatment of tuberculosis pericarditis utilizes isoniazid, 300 mgms. per day in combination with either para-aminosalicylic acid, twelve gms. per day or streptomycin, one gm. per day. The duration of treatment should be two years or longer. If treatment is begun within three months after the onset of symptoms, a more favorable outcome can be predicted than if there is a greater delay. Pericardial paracentesis is indicated sometimes to relieve cardiac tamponade.

Surgical Treatment

The surgical treatment of tuberculous pericarditis is pericardiectomy and should be reserved for the more chronic cases in which medical therapy was instituted late or in cases of restrictive pericarditis whose severity is demonstrated by the presence of hepatomegaly, ascites, ankle edema or "paradoxical pulse." Experience in patients with these signs indicates that surgical therapy yields a higher survival rate than does medical therapy alone.

384 Peachtree Street, N.E.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

DEATHS

FRANK M. (TOMMY) ATKINS, an Atlanta physician for 42 years, died March 25, 1964, in a private hospital. He was 69.

Dr. Atkins, a native of Heflin, Alabama, was a graduate of the University of Alabama and received his medical degree from the Emory University School of Medicine in 1921. He was a member of the Phi Gamma Delta fraternity and the Alpha Kappa Kappa medical fraternity.

He belonged to the First Presbyterian Church, the American and Southern Medical Associations and the Medical Association of Georgia. He was a member of the Piedmont Driving Club, the Capital City Club and the Nine O'Clocks.

For many years, Dr. Atkins had been a member of the staffs of the Emory University and Piedmont hospitals and St. Joseph's Infirmary.

Survivors are his wife, the former Gray Poole; a daughter, Mrs. Albert C. Monk, III, Farmville, North Carolina, and a brother, Robert O. Atkins, Greensboro, Alabama.

WILLIAM EDWARD STOREY, Columbus physician, died March 2, 1964.

A Past President of the Muscogee County Medical Society, Dr. Storey was a specialist in internal medicine in Columbia for several years. He also had served as an official with the Boy Scouts.

He was a graduate of Columbus High School and Emory Medical School.

Survivors include his widow, Mrs. Virginia Johnson Storey, Columbus; two daughters, Mrs. Jack Jordan and Miss Virginia Storey, both of Columbus; two sons, William Bailey Storey, Atlanta, and Edward W. Storey, serving aboard the USS Roosevelt; a brother, Frederick G. Storey, Atlanta; two sisters, Mrs. E. A. Cummings, Frankfurt, Germany, and Mrs. Edward White, Sarasota, and two grandchildren.

JAMES W. WATTS, 52-year-old Bowdon Mayor, died March 4, 1964, in an Atlanta hospital. Dr. Watts had practiced medicine in Bowdon for 22 years and had served as that city's mayor on three different occasions. He was a graduate of the Louisiana State School of Medicine and a member of the AMA, Medical Association of Georgia, and the Carroll-Douglas-Haralson Medical Society. In 1945 he built Jubal Watts Memorial Hospital in memory of his grandfather.

Dr. Watts was a high ranking Mason, being a Shriner of the Yaarab Temple, Atlanta; past master of the Carroll County Convention and at the time of his death was Junior Warden of the fourth district convention and member of Bowdon Lodge No. 206. He received a unique Italian award as Grand Representative.

He is survived by his wife, Ida Mavis Coley Watts; one daughter, Miss Susan Watts, East Point; two sons, Jimmy Watts, USMC, Camp Lejeune, North Carolina, and Jubal Watts, Bowdon; three sisters, Mrs. Eunice Adams, LaGrange; Mrs. Frank Lawrence Faust, New Orleans, and Mrs. Roy B. Johns, Shreveport, Louisiana; three brothers, I. B. Watts, Beaumont, Texas; J. F. Watts, Monroe, Louisiana; and Joseph Lewis Watts, Alameda, California; and 12 nephews.

ALFRED A. WEINSTEIN, an Atlanta surgeon for 25 years, died February 25, 1964, in a Boston Hospital. Dr. Weinstein, 55, was author of the book *Barbed Wire Surgeon*, based on his experience as a Japanese prisoner of World War II.

A native of Boston, the doctor was a magna cum laude graduate of Harvard University where he earned a Phi Beta Kappa Key. He earned his M.D. degree from Harvard Medical School and also did postgraduate work there in surgery.

In 1938 Dr. Weinstein came to Atlanta to enter private practice and teach at Emory University. He joined the Army in 1940 and was sent to the Philippines. He was among those captured at Bataan and was sent to Japan on a prison ship.

He received three Presidential citations, a Bronze Star with five battle stars, two Purple Hearts and a commendation from General Dwight D. Eisenhower.

Dr. Weinstein was a member of The Temple, the Shrine and the Masons. He was a member of the staffs of Georgia Baptist, St. Joseph's and Crawford Long hospitals.

He was a director of the Spalding Institute for Registered Nurses and Chairman of the Board for Advancement of Medical and Nursing Education in Atlanta. He had formerly served as president of the Spalding Pavilion of Grady Memorial Hospital.

In 1928 Dr. Weinstein won the Barton Prize for literature at Harvard. He won the Muse Prize for literature in 1954. He had written many articles for *The Journal and Constitution Sunday Magazine.*

Besides his writing, he was also well known as a sculptor, having exhibited at the Fogg Art Museum at Harvard and the Atlanta High Museum of Art.

Dr. Weinstein was a fellow of the American Board of Preventive Medicine, a fellow of the American Geriatrics Society, and a member of the National Board of Medical Examiners, the Southeastern Surgical Congress, the National Industrial Medical Association, the American Medical Association and the American Heart Association. He was a member of the Standard Club and B'nai B'rith.

Dr. Weinstein is survived by his wife, the former Hannah Kaunitz; a daughter, Miss Elsa Weinstein, Atlanta; two sons, Malcolm Weinstein, U. S. Army, Germany, and Ronald Weinstein, a student at the University of Georgia; three sisters, Mrs. Marion Epstein, Swampscott, Mass., Mrs. Ida Gan, Belmont, Mass., and Mrs. Dorothy Weisman, Beverly, Mass., and two brothers, Daniel W. Weinstein and Samuel Weinstein, Swampscott, Mass.

SOCIETIES

Perry White, Atlanta, presented a discussion of low back pain to the BALDWIN COUNTY MEDICAL SOCIETY at their March 10 meeting in Milledgeville.

Members of the FLOYD COUNTY MEDICAL SOCIETY were guests of the Rome Shrine Club at an appreciation dinner held March 19 in Rome. Osler Abbott, M.D. and William Kelly, M.D. of Emory University Hospital, Atlanta, presented the program.

Members of the FULTON COUNTY MEDICAL SOCIETY rededicated themselves to the principles of medicine in a ceremony held April 2 at the Academy of Medicine, Atlanta. Bishop Arthur J. Moore of the Methodist church addressed the group.

The 1710th USAF Hospital at Hunter Air Force Base, Savannah, was host for the March meeting of the GEORGIA MEDICAL SOCIETY. Guest speaker was Brig. Gen. Kenneth E. Pletcher, deputy surgeon general for the Air Force. General Pletcher's address was entitled, "Worldwide Operations of the USAF Medical Service."

HALL COUNTY MEDICAL SOCIETY'S guest speaker for their February meeting was Angier Wills, M.D., Atlanta, who spoke on oral carcinoma and chemotherapy.

THOMAS-BROOKS MEDICAL SOCIETY held its quarterly meeting March 19 at Quitman. Two Albany doctors presented the program, "Common Athletic Injuries and Their Management," was the topic chosen by A. M. Freeman, M.D., and Charles Finney, M.D. discussed, "Eyeballs I Have Known."

PERSONALS

The American College of Obstetricians and Gynecologists has announced the names of 649 Fellows and Associate Fellows to be inducted into the College at the 12th Annual Clinical Meeting held this month, May 17-22, in Bal Harbour, Florida. Georgia members include the following: *Atlanta*—Eugene L. Griffin, Conway W. Hunter, Jr., Herbert L. Shessel, Abraham S. Velkoff; *Augusta*—C. K. Aydar; *Columbus*—Robert H. Carpenter; *Dalton*—Sidney L. Sellers; *Decatur*—Betty Ann Brooks, Ronaldo R. Nodal, T. G. Smith, John Wade Walker; *Gainesville*—Barton Allan McCrum; *Marietta*—Jack E. Tanner; *Rossville*—William D. Crawley, Jr.; *Savannah*—William G. Sutlive.

First District

No news submitted.

Second District

FRANK A. LITTLE, Thomasville, head of the Department of Anesthesiology at Archbold Memorial Hospital, has been elected Chief of Staff. HENRY PEPIN was named President-Elect; JAMES TAYLOR, Secretary; and JOHN T. KING, JR., Treasurer.

CARL PITTMAN, JR., Tifton, was guest speaker at the regular meeting of the Woman's Auxiliary to the Tift County Medical Society in February. Dr. Pittman spoke on "Medical Legislation."

Eighteen doctors, five of whom are now residing in Blakely, two who are planning to locate there, and eleven from surrounding towns make up the medical staff of the Early Memorial Hospital, R. C. Singletary, chairman of the Hospital Authority, has announced.

Resident doctors on the staff include W. C. BAXLEY, Chief of Staff, JAMES H. CROWDIS, Vice-Chairman, W. McCALL CALHOUN, Secretary, JACK G. STANDIFER, and WILLIAM H. WALL, MIKELL KARSTEN of Spartanburg, S. C., and WILLIAM HITT of Augusta, both now interning, have announced their intentions of coming to Blakely for the practice of medicine and have been approved for the staff.

Non-resident staff members are SAMUEL WINDHAM, Dothan; ROBERT JENNINGS, Arlington; RICHARD DICKINSON, Radiologist, Bainbridge; H. B. JENKINS and H. B. BAXLEY, Donaldsonville; HOMER LASSITER, Arlington; J. Z. McDANIEL, Albany; JOHN A. MEIER, Albany; FREDERICK THOMPSON, Pathologist, Americus; and CHARLES McCALL, Albany.

Third District

"Toxemia of Pregnancy," was the title of a talk given by HERBERT BIRCH, Associate Professor of Obstetrics and Gynecology, Emory University of Medical School, Atlanta, at the March meeting of the Muscogee County Medical Society.

Fourth District

W. P. KIRKLAND, who for 34 years has practiced medicine in Manchester, recently announced his retirement. He closed his office March 15, 1964.

Fifth District

CARTER SMITH, Atlanta, has been elected to a three-year term on the board of trustees of the American Society of Internal Medicine at its annual convention at Atlantic City, N. J.

JOSEPH SWARTWOUT, Atlanta, spoke on "Cause and Prevention" at the recent program on "The Mentally Retarded Child, His Family, His Community, His Future," sponsored by the Georgia Association for Mental Health, Inc., Georgia Association for Retarded Children, Inc., and the Georgia State League of Nursing.

JOHN D. THOMPSON was recently a guest on the faculty of the Symposia in Gynecology and Obstetrics at the University of Oklahoma Medical Center in Oklahoma City.

ROBER M. WEBSTER recently announced the opening of his medical laboratory in the King Professional Building, East Point. Dr. Webster has also recently been appointed to the staff at South Fulton Hospital in East Point.

Two Atlanta physicians, FRED L. ALLMAN, JR., a specialist in orthopedic surgery; and VERNON E. POWELL, President of the Georgia Chapter of the Arthritis and Rheumatism Foundation, took part in a postgraduate seminar on arthritis and related diseases and the care and prevention of athletic injuries held March 13 and 14 at Jacksonville, Florida.

"Cardiovascular Research and Surgery," was the chosen topic of DAVID HUBBARD and ROBERT SCHLANT, Atlanta, when they spoke March 6 to the members of the Woman's Auxiliary to the Fulton County Medical Society.

BRUCE LOGUE, Atlanta, recently addressed the Tidewater Heart Association at Norfolk, Virginia. The titles of his addresses were "Recent Advances in Management of Cardiac Arrhythmias," and "Subtle Signs and Symptoms of Congestive Heart Failure."

CHENEY C. SIGMAN, JR., Atlanta, attended the Graduate Instructional Course and the 20th Annual Congress of the American College of Allergists at Miami Beach, March 2-6. At the time of the meeting, Dr. Sigman was elected, following examination, to full fellowship in the American College of Allergists.

The second Teacher's Seminar on Cancer was held March 12 for DeKalb, Newton, and Rockdale County teachers and principals. Participation panelists, all members of the DeKalb County Medical Society were HERBERT S. GIRARDEAU, H. DUANE BLAIR, JAMES E. ANTHONY, JR., ERNEST C. ATKINS, L. C. BUCHANAN, LAMAR S. McGINNIS, JR., and S. ANGIER WILLS. New Officers elected for the society include President, HOWARD B. LEE; Vice-President, LUTHER M. VINTON, JR.; President-Elect, JAMES E. ANTHONY, JR.; Corresponding Secretary, H. HARPER BUTTERWORTH; and Secretary-Treasurer, M. HOBSON RICE.

Sixth District

A postgraduate course on "Obstetrics Problems in Private Practice" was attended in late February by BEN C. BARROW of Monticello.

Seventh District

A certificate of appreciation for 15 years of services as an uncompensated member of Selective Service was presented to two Cedartown physicians recently — WILLIAM BLANCHARD and C. B. ELLIOTT.

RALPH W. FOWLER, SR. and ROBERT P. COGGINS, Marietta, have been reappointed to five year terms on the Marietta Hospital Authority.

Eighth District

No news submitted.

Ninth District

IRVING D. HELLENGA, Toccoa, attended a postgraduate course on "Obstetrics Problems in Private Practice" which was held February 20 at the Medical College of Georgia, Augusta.

Tenth District

NORMAN PURSLEY spoke to the members of the Woman's Auxiliary of the Richmond County Medical Society at a meeting held February 25 at the Gracewood Training School. "The Roll of the Institution in Mental Health," was the subject of Dr. Pursley's talk.

CORBETT H. THIGPEN, Augusta psychiatrist and Associate Clinical Professor at the Medical College of Georgia, addressed the Seminar of the Georgia Association of Plaintiffs' Trial Attorneys at the DeSoto Hotel, Savannah, March 27. Dr. Thigpen's subject was, "Psychic Results of Trauma, Including the Aggravation Factor."

Two Augusta physicians, G. LOMBARD KELLY and ROBERT C. McGAHEE, were paid tribute by the Woman's Auxiliary to the Richmond County Medical Society for having served 40 years in the field of medicine.

WERE BEST AND BEAUMONT "CLINICAL INVESTIGATORS"?

Proposals have been made that one private or ganization or another should undertake the role of certifying experts as qualified to evaluate the safety and effectiveness of new drugs. In my opinion, such proposals have not taken into account all of the implications of such a censorship role. In the first place, the government cannot delegate such authority to any private group. Furthermore, there is no common denominator of education or training that distinguishes a careful, reliable, accurate observer from one who is motivated by the will to believe or, sometimes, not to believe. Let us not forget that Charles Best was a medical student when he did his Nobel Prize winning work on Insulin, and Beaumont an undistinguished Army surgeon when he made his epochal observations on gastric physiology, utilizing only one patient and without any special clinical facilities. — Theodore G. Klumpp, M.D., in *Illinois Medical Journal,* October, 1963.

EXCESSIVE PREOCCUPATION WITH SAFETY?

There can be little doubt that the drug amendments of 1962 were passed to protect you and the public from harmful drugs. I am afraid, however, that the Congress and the public expect more than this or any law can deliver and, as I have said before, as long as we have drugs, as long as we have airplanes and even bicycles, we will have accidents and the development of flaws that only time and wide-spread use will uncover. There is a hazard in everything we do. It is right that we should take all reasonable steps to minimize these hazards; but, in the field of drugs, trying to look at it objectively, I think we are entering an era in which we are excessively preoccupied with safety. The pendulum has been given an hysterical push. It can seriously interfere with the more important objectives of providing the tools to alleviate the ills that still afflict mankind. If we fail in this endeavor, we can lose more than we gain; and, as Alfred North Whitehead so wisely said, "Panic of error is the death of progress." — Theodore G. Klumpp, M.D., in *Illinois Medical Journal,* October, 1963.

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PROCEEDINGS

110TH ANNUAL SESSION

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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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OFFICIAL PROCEEDINGS

110th Annual Session

of the

MEDICAL ASSOCIATION OF GEORGIA

Macon, Georgia

May 3-6, 1964

First Session, House of Delegates

Second Session, House of Delegates

First General Business Session

Second General Business Session

Third General Business Session

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FIRST SESSION, HOUSE OF DELEGATES

MONDAY, MAY 4, 1964

THE FIRST SESSION of the House of Delegates of the Medical Association of Georgia was called to order by Speaker J. Frank Walker, Atlanta, at 9:05 A.M. in the Main Meeting Room, Macon Auditorium, Macon, Georgia, in conjunction with the 110th Annual Session of the Medical Association of Georgia.

Speaker Walker called for a preliminary report of the delegates' attendance. John Godwin, Atlanta, Chairman of the House of Delegates Credentials Committe, reported that there was a quorum of 40 members present and accounted for, and the Speaker then declared a quorum present and the House in official session. A complete report made by the Credentials Committee on the attendance at the First Session of the House of Delegates follows:

Attendance

In a compilation of attendance taken from the official roll, 47 county medical societies were represented by their duly elected delegates or alternates. Twenty-six medical societies were not represented at this First Session. Of a total of 149 authorized delegates from their respective medical societies, the official roll showed 103 delegates present at this First Session.

BALDWIN: J. G. Bohorfoush, George L. Echols, Jr.; BIBB: Waddell Barnes, William R. Birdsong, Braswell E. Collins, Jack T. Hogan, Jr., Jule C. Neal, Jr., M. C. Newton, Oscar S. Spivey; BULLOCH-CANDLER-EVANS: L. H. Griffin; BURKE: Walter R. Voyles; CARROLL-DOUGLAS-HARALSON: J. H. Beall, J. Franklin Green; CHATTAHOOCHEE: Rupert H. Bramblett; CHEROKEE-PICKENS: C. J. Roper; CRAWFORD W. LONG: Royce E. Banister, F. M. McElhannon; CLAYTON-FAYETTE: F. A. Sams, Jr.; COBB: Remer Y. Clark, Robert P. Coggins, R. W. Fowler, Donald R. Rooney; COWETA: Ernest E. Proctor; DECATUR-SEMINOLE: Henry A. Bridges; DEKALB: Earnest C. Atkins, H. H. Butterworth, M. F. Simmons, T. Q. Spitzer, M. Virginia Tuggle; DOUGHERTY: J. D. Bateman, J. E. Cantrell, W. P. Rhyne; EMANUEL: R. J. Moye; FLINT: J. T. Christmas; FLOYD: Russell E. Andrews, Jack M. Waldrep; FULTON: Fred L. Allman, Thomas J. Anderson, Jr., M. F. Bryant, Charles B. Fulghum, Joseph L. Girardeau, John T. Goodwin, Irving L. Greenberg, J. H. Harrison, Fleming L. Jolley, Joseph C. Massee, W. P. Nicholson, Lamar B. Peacock, A. A. Rayle, Jr., J. Frank Walker, Robert E. Wells, Frank L. Wilson, Jr., Joseph S. Wilson, W. A. Wood; GEORGIA MEDICAL: John L. Elliott, W. H. Fulmer, Lawrence Lee, Jr., F. T. Nichols, Jr., W. W. Osborne, Jules Victor, Jr.; GLYNN: C. S. Britt; HALL: John K. Burns, III; JACKSON-BARROW: P. T. Scoggins; JASPER: E. M. Lancaster; JEFFERSON: C. Roy Williams; LAURENS: Fred J. Coleman; MCDUFFIE: Albert G. LeRoy; MERIWETHER-HARRIS: James E. Collins; MUSCOGEE: Charles R. Smith; NEWTON-ROCKDALE: J. R. Sams; OCMULGEE: F. P. Holder, Jr.; PEACH BELT: F. M. Lindsey, H. E. Weems, Jr.; RANDOLPH-STEWART-TERRELL: John G. Gates; RICHMOND: William E. Barfield, Clyde A. Burgamy, Preston D. Ellington, Alfred J. Green, Julius T. Johnson, R. C. McGahee, Henry D. Scoggins, W. L. Shepeard, C. A. White, Jr.; SOUTH GEORGIA: J. M. Miller, S. H. Story, Jr.; SOUTHEAST GEORGIA: Robert W. Oliver, Jr.; SPALDING: James M. Skinner, Virgil B. Williams; STEPHENS: Irving D. Hellenga; SUMTER: J. H. Robinson, III; TROUP: R. D. Dean, J. M. Grisamore; UPSON: T. A. Sappington; WALKER-CATOOSA-DADE: Robert T. Jones; WARE: Floyd E. Davis, L. C. Durrence; WASHINGTON: William Rawlings; WAYNE: E. L. Harrell WHITFIELD: Royal T. Farrow, David A. Wells; WILKES: John E. Pollock, Jr., WORTH: W. P. Stoner.

County Medical Societies not represented at this session of the House of Delegates were as follows: ALTAMAHA, BARTOW, BEN HILL-IRWIN, BLUE RIDGE, CAMDEN-CHARLTON, CHATTOOGA, COFFEE, COLQUITT, ELBERT - FRANKLIN - HART, GORDON, GRADY, HABERSHAM, JENKINS, LAMAR, MITCHELL, OCONEE VALLEY, POLK, RABUN, SCREVEN, SOUTHWEST GEORGIA, TAYLOR, TELFAIR, THOMAS - BROOKS, TIFT, TRI-COUNTY, and WALTON.

Reference Committees

Speaker Walker appointed the following House of Delegates Reference Committees:

REFERENCE COMMITTEE NO. 1: Jules Victor, Jr., Savannah, Chairman; Bruce Newsome, Columbus, Vice Chairman; J. H. Beall, Carrollton, Secretary; John M. Miller, Valdosta; Russell E. Andrews, Rome; C. S. Britt, Brunswick; Frank P. Holder, Jr., Eastman; Cecil A. White, Jr., Augusta; and Lamar B. Peacock, Atlanta.

REFERENCE COMMITTEE NO. 2: William R. Birdsong, Macon, Chairman; J. E. Cantrell, Albany, Vice Chairman; Frank L. Wilson, Jr., Atlanta, Secretary; Virginia D. Hamilton, Cartersville; Louis H. Griffin, Claxton; J. D. Bateman, Albany; Robert Wells, Atlanta; W. W. Osborne, Savannah; and Roy Gibson, Columbus.

REFERERENCE COMMITTEE NO. 3: T. A. Sappington, Thomaston, Chairman; Harrison Rogers, Atlanta, Vice Chairman; F. A. Sams, Fayetteville, Secretary; John E. Pollick, Jr., Washington; Roy T. Farrow, Dalton; L. C. Durrence, Jr., Blackshear; E. L. Harrell, Jesup; and Charles R. Smith, Columbus.

REFERENCE COMMITTEE NO. 4: Fred Coleman, Dublin, Chairman; J. Frank Harris, Atlanta, Vice Chairman; Braswell E. Collins, Macon, Secretary; John B. Crawford, Barnesville; J. M. Grisamore, LaGrange; W. H. Fulmer, Savannah; John E. Hendley, Millen; A. J. Green, Augusta; and M. F. Simmons, Decatur.

REFERENCE COMMITTEE NO. 5: H. E. Weems, Perry, Chairman; John B. O'Neal, Elberton, Vice Chairman; Preston Ellington, Augusta, Secretary; R. T. Jones, LaFayette; Henry Bridges,

Bainbridge; James M. Skinner, Griffin; W. T. Smith, Milledgeville; Oscar S. Spivey, Macon; and Thomas J. Anderson, Jr., Atlanta.

Credentials and Tellers Committees

Speaker Walker announced the prior appointments of the House of Delegates Credentials Committee and Tellers Committee as follows:

Credentials Committee: John T. Godwin, Atlanta, Chairman; A. G. LeRoy, Thomson; and Preston D. Ellington, Augusta.

Tellers Committee: W. P. Rhyne, Albany, Chairman; Irving D. Hellenga, Toccoa; and W. P. Stoner.

Guest Speaker

Speaker Walker then called on William R. Birdsong of Macon, who introduced the House of Delegates keynote speaker, the Honorable Peter Zack Geer, Lieutenant Governor of the State of Georgia. Lt. Governor Geer addressed the membership of the MAG House of Delegates on matters concerning the health of the State of Georgia.

Auxiliary to MAG Report

Speaker Walker called on Ralph Fowler of Marietta, Chairman of the MAG Advisory Committee to the Woman's Auxiliary of the MAG, who escorted Mrs. John Porter, Savannah, President of the Woman's Auxiliary to the Medical Association of Georgia, to the speaker's platform. Mrs. Porter then addressed the membership of the House of Delegates on the activities of the Woman's Auxiliary to MAG.

Approval of 1963 Minutes

To expedite the reading and adoption of the minutes of the 1963 Sessions of the House of Delegates held in conjunction with the 109th Annual Session of the Medical Association of Georgia meeting May 5-8, 1963, at Jekyll Island, Georgia, the chair entertained a motion that the minutes as published in the June, 1963 issue of the *Journal of the Medical Association of Georgia* be approved. On motion duly made and seconded, it was noted that these minutes be so approved as published in their entirety in the June, 1963 issue of the *JMAG*.

Annual Reports

Speaker Walker called for the Annual Reports of Officers, Council, Councilors and Vice Councilors, Association Committees and Boards and Sub-Committees. The reports of Officers, Council, Councilors and Vice Councilors, Association Committees and Boards and Board Sub-Committees, and allied reports as introduced at this Session are listed below with the Reference Committee to which they were referred. The full report, the action by the Reference Committee, and the House of Delegates action is listed under the proceedings of the Second Session of the House of Delegates—See pages 174 to 215.

OFFICERS

President—Reference Committee No. 1.
President-Elect—Reference Committee No. 1.
Immediate Past President—Reference Committee No. 1.
First Vice President—Reference Committee No. 1.
Second Vice President—Reference Committee No. 1.
Secretary—Reference Committee No. 1.
Treasurer—Reference Committee No. 1.
Speaker of the House—Reference Committee No. 2.
*Vice Speaker of the House—Reference Committee No. 2.
AMA Alternate Delegates—Reference Committee No. 2.

COUNCIL

Council of the MAG—Reference Committee No. 2.

COUNCILORS AND VICE COUNCILORS

First District Councilor—Reference Committee No. 2.
Second District Vice Councilor—Reference Committee No. 2.
Third District Councilor—Reference Committee No. 3.
Fourth District Councilor—Reference Committee No. 3.
Fifth District Councilor—Reference Committee No. 4.
Sixth District Councilor—Reference Committee No. 5.
Seventh District Councilor—Reference Committee No. 4.
Eighth District Councilor—Reference Committee No. 5.
Ninth District Councilor—Reference Committee No. 1.
Tenth District Councilor—Reference Committee No. 1.
Georgia Medical Society Councilor—Reference Committee No. 2.
Georgia Medical Society Vice Councilor—Reference Committee No. 2.
Fulton County Medical Society Councilor—Reference Committee No. 4.
Fulton County Medical Society Vice Councilor—Reference Committee No. 4.
Bibb County Councilor—Reference Committee No. 5.
Richmond County Councilor—Reference Committee No. 1.
Richmond County Vice Councilor—Reference Committee No. 1.

ASSOCIATION COMMITTEES

Finance—Reference Committee No. 2.
*Professional Conduct—Reference Committee No. 3.
Woman's Auxiliary Advisory—Reference Committee No. 3.

BOARDS AND SUBCOMMITTEES

Annual Session—Reference Committee No. 3.
Constitution & Bylaws—Reference Committee No. 2.
Crippled Children—Reference Committee No. 3.
Disaster Medical Care—Reference Committee No. 3.
Mat. & Infant Welfare—Reference Committee No. 3.
*Public Health—Reference Committee No. 3.
*Rehabilitation—Reference Committee No. 3.
*School Child Health—Reference Committee No. 3.
*Veterans Affairs—Reference Committee No. 3.
Hospital Activities—Reference Committee No. 4.
Blood Banks—Reference Committee No. 4.
Hospital Relations—Reference Committee No. 4.
Insurance & Economics—Reference Committee No. 4.
Relative Value Study—Reference Committee No. 4.
Interprofessional Relations—Reference Committee No. 4.
Legislation—Reference Committee No. 2.
Medical Education—Reference Committee No. 5.
AMA-ERF—Reference Committee No. 5.
Clarkesville Lab—Reference Committee No. 5.
*Medical Education—Reference Committee No. 5.
Occupational Health—Reference Committee No. 5.
*Industrial Health—Reference Committee No. 5.
Rural Health—Reference Committee No. 5.

** No reports received.*

Public Service—Reference Committee No. 1.
Public Service—Reference Committee No. 1 .
*Public Service Information Clearing House—Reference Committee No. 1.
Medicine and Religion—Reference Committee No. 1.
Weekly Health Column—Reference Committee No. 1.
Special Activities—Reference Committee No. 2.
*Volunteer Health Agencies—Reference Committee No. 5.
Cancer—Reference Committee No. 5.
Mental Health—Reference Committee No. 5.

ALLIED REPORTS

Report of the Journal—Reference Committee No. 4.

General Practitioner of the Year Award

Speaker Walker then presented the two nominations for the 1964 Georgia General Practitioner of the Year Award as received from the Association's First General Business Session. The two nominees presented were: J. D. (Joe) Applewhite of Macon, and H. E. Griggs of Conyers. Dr. Walker then asked the delegates to mark their "GP of the Year" Ballot with the name of the candidate of their choice for this high honor. Tellers Committee Chairman W. P. Rhyne then reported that Dr. J. D. Applewhite had been elected the 1964 General Practitioner of the Year, and Speaker Walker announced that the award would be presented at the Third General Business Session May 6.

Supplementary Reports

Speaker Walker announced that as the first order of new business he wished to present supplementary reports for referral to a House Reference Committee. Dr. Walker stated that while it is usual for supplementary reports to supplement a report already submitted—in that a supplementary report adds some new data to the original report—he stated some supplementary reports are really late reports in that the original report was submitted too late to be published in the House of Delegates Handbook.

The following supplementary reports were referred as follows:

Supplementary Report A: Second District Councilor—Reference Committee No. 2.
Supplementary Report B: AMA Delegates—Reference Committee No. 2.
Supplementary Report C: Medical School Course Subcommittee—Reference Committee No. 5.
Supplementary Report D: Governmental Medical Services Board—Reference Committee No. 3.
Supplementary Report E: Muscogee County Medical Society Councilor—Reference Committee No. 3.
Supplementary Report F: Woman's Auxiliary to MAG—Reference Committee No. 3.
Supplementary Report G: Annual Session Meeting Sites—Reference Committee No. 2.
Supplementary Report H: Medical Defense Subcommittee—Reference Committee No. 4.
Supplementary Report I: Medicine and Religion Subcommittee—Reference Committee No. 1.
Supplementary Report J: Package Insurance Plan—Reference Committee No. 4.
Supplementary Report K: MAG Affiliate Membership By-laws Amendment—Reference Committee No. 2.
Supplementary Report L: County Medical Society Membership Request—Reference Committee No. 2.
Supplementary Report M: Redistricting of Councilor Districts—Reference Committee No. 2.
Supplementary Report N: Tax Equality—Reference Committee No. 2.

Resolutions

Speaker Walker called for the introduction of Resolutions as the second order of new business and the following Resolutions were presented:

Resolution No. 1: Constitutional Amendment to Abolish the Office of Coroner—Reference Committee No. 2.
Resolution No. 2: Honorary Membership in MAG for Herman Jones, Ph.D.—Reference Committee No. 1.
Resolution No. 3: Collection of GaMPAC Dues—*Withdrawn.*
Resolution No. 4: Honoring Congressman Carl Vinson—Reference Committee No. 5.
Resolution No. 5: Division of County Medical Societies—Reference Committee No. 2.

Speaker Walker called for other resolutions and there being none, a motion was made and duly seconded that the House recess until its Second Session May 6 at 9:00 A.M.

SECOND SESSION, HOUSE OF DELEGATES

(Recessed)

WEDNESDAY, MAY 6, 1964

THE SECOND SESSION (Recessed) of the House of Delegates of the Medical Association of Georgia held in conjunction with the 110th Annual Session of the Association was called to order by Speaker J. Frank Walker at 9:05 A.M., in the Main Meeting Room, Macon Auditorium, Macon, Georgia, on May 6, 1964.

Speaker Walker called on Credentials Committee Vice Chairman Preston Ellington for a preliminary report of attendance. Dr. Ellington reported that

more than 40 members of the House of Delegates were registered as present and Speaker Walker then declared a quorum present and accounted for, and the House of Delegates in session. The Credentials Committee made the following complete report on attendance at the close of the meeting:

Attendance

In a compilation of attendance taken from the official roll, 43 county medical societies were represented by their duly elected delegates or alternates. Thirty county medical societies had no representatives at the Second Session. Of a total of 149 authorized delegates from their respective medical societies, the official roll showed 94 delegates present at this Second Session.

BALDWIN: J. G. Bohorfoush, George L. Echols, Jr.; BIBB: Waddell Barnes, Braswell Collins, J. T. Hogan, Jr., Jule C. Neal, Jr., M. C. Newton Oscar S. Spivey; BULLOCH-CANDLER-EVANS: L. H. Griffin; BURKE: Walter R. Voyles; CAMDEN-CHARLTON: Joseph M. Jackson; CARROLL-DOUGLAS-HARALSON: J. H. Beall, J. F. Green; CHEROKEE-PICKENS: C. J. Roper; CLAYTON-FAYETTE: F. A. Sams Jr.; COBB: Remer Y. Clark, Robert P. Coggins, T. J. VanSant, Jr.; COWETA: Ernest E. Proctor; CRAWFORD W. LONG: R. E. Banister, F. M. McElhannon; DECATUR-SEMINOLE: Henry A. Bridges; DEKALB: Earnest C. Atkins, H. H. Butterworth, Floyd R. Sanders, T. Q. Spitzer, M. Virginia Tuggle; EMANUEL: R. J. Moye; FLINT: J. T. Christmas; FLOYD: R. E. Andrews; FULTON: T. J. Anderson, Jr., John S. Atwater, Linton Bishop, Milton F. Bryant, F. W. Dowda, Charles B. Fulgham, J. L. Girardeau, J. E. Griffith, J. Frank Harris, J. H. Harrison, Haywood N. Hill, Fleming Jolley, Joseph C. Massee, J. L. Mays, William Moore, Harrison Rogers, J. Frank Walker, R. E. Wells, Frank L. Wilson, Jr., Joseph S. Wilson, W. A. Wood; GEORGIA MEDICAL: J. L. Elliott, W. H. Fulmer, F. T. Nichols, Jr.; GLYNN: C. S. Britt; HALL: J. K. Burns; JACKSON-BARROW: P. T. Scoggins; JASPER: E. M. Lancaster; JEFFERSON: C. Roy Williams; LAMAR: John B. Crawford; LAURENS: Fred J. Coleman; MCDUFFIE: Albert G. LeRoy; MERIWETHER-HARRIS: James E. Collins; MUSCOGEE: Luther J. Smith, R. H. Vaughn; PEACH BELT: F. M. Lindsey, H. E. Weems, Jr.; RANDOLPH-STEWART-TERRELL: John G. Bates; RICHMOND: William E. Barfield, Preston D. Ellington, William A. Fuller, Thomas W. Goodwin, Julius T. Johnson, R. C. McGahee, J. L. Mulherin, W. L. Shepeard, C. A. White; SOUTHEAST GEORGIA: M. H. Whittle; SPALDING: James M. Skinner, Virgil Williams; STEPHENS: Irving D. Hellenga; SUMTER: John H. Robinson, III; TROUP: R. D. Dean, J. M. Grisamore; UPSON: T. A. Sappington; WALKER-CATOOSA-DADE: Robert T. Jones; WARE: Floyd Davis, L. C. Durrence; WAYNE: E. L. Harrell; WHITFIELD: R. T. Farrow, D. A. Wells; WILKES: John E. Pollock, Jr.; WORTH: W. P. Stoner.

County Medical Societies not represented at this Second Session of the House of Delegates were as follows: ALTAMAHA, BARTOW, BEN HILL-IRWIN, BLUE RIDGE, CHATTOOGA, CHATTAHOOCHEE, COFFEE, COLQUITT, DOUGHERTY, ELBERT-FRANKLIN-HART, GORDON, GRADY, HABERSHAM, JENKINS, MITCHELL, NEWTON-ROCKDALE, OCONEE VALLEY, OCMULGEE, POLK, RABUN, SCREVEN, SOUTH GEORGIA, SOUTHWEST GEORGIA, TAYLOR, TELFAIR, THOMAS-BROOKS, TIFT, TRI-COUNTY, WALTON, and WASHINGTON.

Reference Committee Reports

Speaker J. Frank Walker stated the next order of business would be the Reference Committee Reports as follows:

Report of Reference Committee No. 1

Jules Victor, Jr., Savannah, Chairman

(The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendation and the action pursuant to it taken by the House of Delegates):

Reference Committee No. 1 met in the Main Meeting Room of the Macon Auditorium, Macon, Georgia, at 2:30 P.M. on May 4, 1964. Members present were: Jules Victor, Sr., Savannah, Chairman; J. H. Beall, Carrollton, Secretary; John M. Miller, Valdosta; Russell E. Andrews, Rome; Frank P. Holder, Jr., Eastman; Cecil A. White, Jr., Augusta; Lamar B. Peacock, Atlanta; and C. W. Britt, Brunswick. Bruce C. Newsome, Columbus, was not present.

President

GEORGE R. DILLINGER, M.D., *Thomasville*

During the year legislation both state and national has required more concentration and activities than any other problem. The recodification of Georgia health laws and the maintenance of a scientific State Board of Health has been accomplished.

The Governor of Georgia has publicly stated that in January he will support the appropriation of funds to implement the second phase of Kerr-Mills, or Medical Assistance to the Aged.

In the field of public health, at the request of the Georgia State Board of Health, the M.A.G. is making a study of the various programs and problems involving patient care. These involve the Cancer Clinic Program, the Crippled Children Program, etc. It is to be hoped that some concrete recommendations may result in an improvement in the care rendered.

The mental health picture certainly is improving in Georgia. At Milledgeville, the state hospital has been accredited for psychiatric residency training.

However, I wish to express a word of caution in the mental health field. There is a belief particularly among non-medical individuals that money will correct all ills. The proposal of setting up mental health clinics all over Georgia under the Department of Public Health, would be a big step toward taking the care of the mentally ill out of the hands of medical personnel. This program should be expanded slowly and only where adequate medical care (specialized) is available.

Some progress is being made in the field of medical education. The Association must step up its interest and activity in all phases of medical education, undergraduate, graduate and continuing education for medical and paramedical personnel. We have all too often been remiss and let other organizations and even the laity do the job we should be doing.

In the field of medical education we are not using the facilities that are presently available.

Certainly Georgia needs another dental school and it is imperative that we have another medical school. We are producing only about half the physicians, dentists, and nurses that our expanding population needs.

The medical schools are the key to the future in medicine, and the health of our people. They select the students, train them in medicine, give them the degree M.D., supervise their graduate training and advise on the continuing studies throughout the life of the physician.

Our educational shortage for the training of paramedical personnel parallels the nurse-dentist-physician shortage. Our M.A.G. Board of Medical Education has a full time problem, continually before it.

The M.A.G. and the A.M.A. Council on Medical Education and Hospitals is at the present time setting up a "Georgia Conference on Medical Education." It is hoped that a great deal can result from this conference and that all will participate.

Some change in the Annual Session Program was made for the 1964 Annual Session. This was done in the attempt to make the session more available and give everyone a better opportunity to participate in the policies of the Association. No scientific meetings are scheduled for the period of reference committee hearings.

It is the opinion of your President that the M.A.G. should set up its own sections. For the past many years our sections have been supervised and run by the specialty societies. For the past two years the M.A.G. has been embarrassed by having speakers at the Annual Session render accounts six months after the meeting that were supposed to have been paid by other groups.

Certainly the M.A.G. should try to take care of its own programs, elect its own section officers who are loyal to M.A.G. This would require changes in the Constitution and Bylaws of the Association.

In times of intense political activity, the Executive Committee should have broad powers. It is sometimes necessary to change our legislative program in a matter of hours. We feel that this should be spelled out in our Bylaws.

These are some of the thoughts and problems faced by your President during the past year. Some of them are proposals for consideration and action by the House of Delegates.

Our Association is progressing year by year. Our state office and administrative personnel are handling problems impossible to consider a few short years ago. Without the loyalty and help of both the elected offices of the Association and the lay executive office personnel a President cannot function with any efficiency. I especially want to thank all the officers and committees of the Association for their activity during the past year.

I want to thank every one of you for the honor and privilege of serving the Association. Since this is my swan song, my only hope is that the M.A.G. is a little better organization as result of my activity.

REFERENCE COMMITTEE RECOMMENDATION — The committee received the Presidential report as information with commendation.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the President on motion duly made and seconded.

President-Elect

J. G. McDaniel, M.D., *Atlanta*

In my capacity as President-Elect during the Association year 1963-64, I have had the privilege of serving the Medical Association of Georgia on many occasions. These activities have given me new insight into the progress of the profession which I hope will make my forthcoming year as your President more meaningful.

I have participated in six meetings of the MAG Council and 12 meetings of the Council Executive Committee.

It was my pleasure to appear on the program of the MAG Annual County Society Officer's Conference and the MAG-Food and Drug Administration 2nd Regional Conference on Quackery. I also was asked, at the request of the Association President, to testify before various committees of the legislature during the recent session of the Georgia General Assembly.

I was pleased to welcome physicians and laymen in behalf of the Medical Association of Georgia at southeastern regional meetings convened in Atlanta.

Out-of-state travel, as a representative of the Association, included attendance at two Chicago meetings: the Annual AMA Institute and the AMA Legislative & Speakers Bureau meeting. I received an invitation and attended a joint AMA-American Nurses Association meeting in Williamsburg, Virginia in behalf of AMA. The highlight of this meeting was discussion on nursing education.

It has been a great joy to serve with the Medical Association of Georgia President and the other Association Officers throughout the year. These leaders are truly devoted to your interests in promoting the art and science of medicine.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the President-Elect for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the President-Elect as recommended by the Reference Committee on motion duly made and seconded.

Immediate Past President

Thomas W. Goodwin, M.D., *Augusta*

The activities of your immediate past president during the past year have been confined mostly to routine matters. For the first three months of the year correspondence kept coming over my desk, addressed to me as President of the Medical Association of Georgia. Apparently it takes people about three months to recognize a has-been! I have attended all meetings of Council and all meetings of the Executive Committee except when providentially hindered.

Actually the major part of my time given to the Association this year has been related to my new job as chairman of the Board of Medical Education. This is one of the most important boards of our Association, and I hope you will give careful attention to the report of that board, which you will find in your Handbook.

There is one matter which I think the House of Delegates should begin to seriously consider. I can bring this up now because my tenure of office is over and I will not be affected by it. This matter is a question of more equitable compensation for the President of the Medical Association of Georgia. This is a time-consuming task, one which requires a great deal of financial as well as personal sacrifice. I am wondering how much longer we are going to be able to continue to have men available who are willing to make this sacrifice under our present way of doing things. I would appreciate the opportunity of discussing this matter before the Reference Committee, to whom this report is referred.

Again, let me thank all of you for your cooperation and support, and let me thank you one last time for the privilege which you gave me of serving you.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Immediate Past President for his report. It is the feeling of the Reference Committee that some cognizance should be taken for a more equitable compensation for the President during his tenure of office. It is further recommended by the committee that this should be referred to the Finance Committee of the Medical Association of Georgia for immediate action with the power to act.

HOUSE OF DELEGATES ACTION — Adopted the report of the Immediate Past President as recommended by the Reference Committee, with the additional recommendations of the Reference Committee, on motion duly made and seconded.

First Vice President

WALKER L. CURTIS, M.D., *College Park*

Attended all MAG Council meetings during the year.

Attended monthly meetings of Executive Committee, missing only one.

Attended AMA Convention in Atlantic City. Attended: AMA Board of Trustees Reference Committee meetings, reporting the information gained at MAG Delegates' meeting; Conference of officers of State Medical Associations 19th annual meeting; Program on "Medicine and Religion;" House of Delegates session; Dr. Annis address to delegates.

Attended: Fifth District's program "Care of the Whole Man;" GaMPAC District meeting in Athens; GaMPAC Fifth District Executive Committee meeting; 1964 Policy Planning Meeting of the Executive Committee of Council.

Attended, as a guest of honor, the Atlanta Kiwanis Club, Dr. Annis, speaker; Georgia House of Representatives, Dr. Annis, speaker; President's luncheon, SMA Convention, New Orleans, Dr. Annis, speaker.

Participated, as a MAG official representative, in the meeting of officials of statewide organizations to plan role of participation in formulating Georgia's long range mental health program.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the First Vice President for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the First Vice President as recommended by the Reference Committee on motion duly made and seconded.

Second Vice President

JOHN KIRK TRAIN, M.D., *Savannah*

Under the recent change in Bylaws the Second Vice President has become an active member of Council and it has been my pleasure and privilege during the past year to attend all Council meetings and to learn some of the inner workings of the Medical Association of Georgia. It is amazing to see how many facets there are to this operation and to see how much work a handful of men put into the operation of the society for the good of its entire membership. At the present time I am on a committee to which I was appointed for the "investigation of Physician Ownerships of Repackaging Houses," a practice which apparently is flourishing in this state and which has been declared unethical by the American Medical Association. At the present time the committee feels that this should first be corrected by the education of the individual members along the lines of what the AMA has decreed in this matter, and for those who persist in this practice after being so informed, some form of disciplinary action. I am looking forward to next year as First Vice President with a great deal of enthusiasm.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Second Vice President for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Second Vice President as recommended by the Reference Committee on motion duly made and seconded.

Secretary

JOHN T. MAULDIN, M.D., *Atlanta*

This has been an active year for MAG. Political activity has continued on a national and state level. The activities of GaMPAC have continued and it is planned that activities will be expanded within the near future to include a part-time secretary with office space in the Medical Association. Dr. Herbert Alden has been elected Treasurer, and this will enable closer coordination of the educational activities of both GaMPAC and MAG. An unfavorable outcome of the suit brought by the city and county authorities was rendered this year, and as a result MAG will begin paying taxes on the Headquarters property and building. These taxes will go back four years to the time that the Association purchased the present building. In spite of tremendous efforts on the part of MAG, its friends, the Hospital Association, the Dental Association, Pharmacists, and others, the Medical Assistance to the Aging portion of the Kerr-Mills Program has not been activated. However, at the meeting of our County Society Presidents and Secretaries, Governor Sanders promised that it would be implemented January 1965, unless state income from taxes should decrease.

HOSPITAL MEDICAL COUNCIL — This has been the Council's most active year under the able leadership of Dr. Charles Cowart of LaGrange. Most of the hospitals that have made applications have been inspected. About 20% were disapproved on the first inspection. However, no hospital was finally rejected

unless they failed to make the improvements recommended by the Council.

A Committee of the Council made an exhaustive study of the ethics involved in contracts between hospitals and radiologists. This report has been approved by the Council of the Medical Association of Georgia and is available on request.

During the year the Council has been enlarged to include a representative of the Georgia Association of Nursing Homes. This was done with the approval of the parent organization and as a preliminary to establishing a certification program on nursing homes similar to that for small hospitals. The standards have been drawn and will be published before May. I am happy to report that there has been only one request for the mediation services of the Council.

MEDICARE — Dr. R. C. Williams has acted as Director of this program since his retirement from the State Department of Health. The contract with the Department of the Army has been renewed without major change. The following is the statistical report of the Medicare Department of the Medical Association of Georgia.

Total number of claims received	15,042	
Total number returned for additional information	3,056	
Total number submitted to Review Board (special cases)	301	
Total number rejected, mostly because of out-patient care	328	
Total number paid	10,610	
Total dollar amount paid		$864,648.37
Average payment per claim		81.50

THE ADULT RECIPIENT PROGRAM — The Medical Association of Georgia has continued to operate the medical evaluation portion of the Kerr-Mills Program under contract with the Family and Children Services Department of the State of Georgia, and there have been no contractions or expansions of the program during the year.

Total hospital bills processed	21,773	
Total monies paid to hospitals		$3,972,230.79

HEADQUARTERS OFFICE — As Secretary, I have coordinated the administrative problems of the Headquarters Office and handled the correspondence related to medical policy not within the jurisdiction of other officers and committees. The Headquarters Office has functioned well and has been most cooperative due to the foresight and excellent judgment of the Executive Secretary, Mr. Milton Krueger, the Assistant Executive Secretary, Mr. Jim Moffett, and the Assistant Executive Secretary, Mrs. Catherine Wooten. During the year the Council has authorized the appointment of one additional typist in order to better handle the administrative load of the Medical Association.

HEADQUARTERS OFFICE BUILDING — The Headquarters Office Building has been used at least twice a week as a meeting place for MAG and allied organizations. No major repairs or changes have been necessary during the past year.

MAG MEMBERSHIP —

Active	2732
Active dues exempt	345
Service members	54
Associate members	38
TOTAL	3169

SUMMARY — I wish to express my appreciation for the cooperation of the Officers and members of the Medical Association of Georgia, particularly Dr. George Dillinger, President, and Dr. Addison Simpson, Chairman of Council. I desire particularly to thank the members of the Medical Association for their understanding and patience in supplying the information necessary for the proper processing of the Old Age Assistance and Medicare requests. All of the recommendations that I have as Secretary have been discussed with committee and board chairmen within whose jurisdiction they fall.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Secretary for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Secretary as recommended by the Reference Committee on motion duly made and seconded.

Treasurer

JOHN S. ATWATER, M.D., *Atlanta*

The report of the auditors, Ernst and Ernst, is attached. This audit covers the period ending the calendar year December 31, 1963. It is to be pointed out that the Association is in good financial condition, in fact, the best position in many years. While the overhead expenses have increased there has also been an increase in income sufficient to meet these obligations.

I should like to thank most sincerely all those who have had a part in the conduct of the office of the Treasurer and especially our most efficient bookkeeper, Miss Thelma Franklin.

ERNST & ERNST
FIRST NATIONAL BANK BUILDING
ATLANTA, GA. 30303

Chairman of the Council
The Medical Association of Georgia
Atlanta, Georgia

We have examined the statement of assets and liabilities of the several funds of The Medical Association of Georgia as of December 31, 1963, and the related statements of income and expenses and fund equities for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. While it was not practicable to confirm the amount due from the United States Government with respect to the Medicare Fund, we have satisfied ourselves as to this balance by means of other auditing procedures.

In our opinion, the accompanying statement of assets and liabilities and the statements of income and expenses and fund equities present fairly the financial position of the several funds of The Medical Association of Georgia at December 31, 1963, and the results of operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ernst + Ernst

Atlanta, Georgia
February 7, 1964

STATEMENT OF ASSETS AND LIABILITIES — BY FUNDS

The Medical Association of Georgia

December 31, 1963

ASSETS

GENERAL FUND			
Cash:			
Demand deposits		$ 3,469.03	
Savings deposits:			
Restricted	$21,900.00		
Unrestricted	57,000.00	78,900.00	$ 82,369.03
Accounts receivable:			
Advertisers of The Journal		$ 3,151.61	
Due from Old Age Assistance Program		1,426.53	4,578.14
Other assets			625.00
Property and equipment — on the basis of cost:			
Buildings — mortgaged		$110,954.72	
Furniture and equipment		25,696.64	
		$136,651.36	
Less allowances for depreciation		49,050.98	
		$ 87,600.38	
Land — mortgaged		80,000.00	167,600.38
			$255,172.55
ABNER W. CALHOUN LECTURESHIP FUND			
Cash		$ 135.71	
Corporation stocks (quoted market prices $5,573.06) — at cost		5,897.03	6,032.74
MEDICARE FUND — DEPARTMENT OF THE ARMY			
Cash		$ 30,618.09	
Due from United States Government — service fees paid to physicians and dentists		69,381.91	100,000.00
			$361,205.29

LIABILITIES AND EQUITIES

GENERAL FUND		
Liabilities:		
Note payable to insurance company, $4,000.00 installment, with interest at 5%, due on January 1, each year — secured by loan deed on land and building		$ 19,000.00
Excess of claim fees received over claim expenses — United States Government — Medicare		4,548.16
Advance collections:		
1964 membership dues	$ 858.50	
1964 exhibit space payments	2,375.00	3,233.50
Fund equity:		
Restricted:		
Regular operating purposes	$ 20,000.00	
Lecture expenses	172.14	
	$ 20,172.14	
Unrestricted	208,218.75	228,390.89
		$255,172.55
ABNER W. CALHOUN LECTURESHIP FUND EQUITY		6,032.74
MEDICARE FUND — DEPARTMENT OF THE ARMY		
Advance from United States Government		100,000.00
		$361,205.29

STATEMENT OF FUND EQUITIES

The Medical Association of Georgia

Year ended December 31, 1963

	Balance Jan. 1, 1963	Income in Excess of Expenses	Fund Transfers	Balance Dec. 31, 1963
GENERAL FUND				
Restricted for operating purposes	$ 20,000.00	$ -O-	$ -O-	$ 20,000.00
Restricted for lecture expenses	421.42	500.00*	$250.72	172.14
Unrestricted	197,373.68	10,845.07	$ -O-	208,218.75
	$217,795.10	$10,345.07	250.72	$228,390.89
ABNER W. CALHOUN LECTURESHIP FUND	6,257.56	25.90	250.72*	6,032.74
TOTAL	$224,052.66	$10,370.97	-O-	$234,423.63

*Indicates red figure.

STATMENT OF INCOME AND EXPENSES — BY FUNDS

The Medical Association of Georgia

Year ended December 31, 1963

	General Fund	Abner W. Calhoun Lectureship Fund
INCOME		
Medical Association of Georgia dues	$109,770.00	$ -0-
Advertising — The Journal	34,379.34	-0-
Subscriptions — The Journal	759.00	-0-
Exhibitors' fees — 1963 annual meeting	9,225.00	-0-
Interest income	3,428.66	-0-
Dividends — corporate stocks	-0-	267.67
American Medical Association refund	1,178.12	-0-
Contribution from Dr. Calhoun	-0-	268.93
Miscellaneous	25.66	-0-
TOTAL INCOME	$158,765.78	$536.60
EXPENSES		
Fixed allotments	$ 10,160.94	$ -0-
Association office	72,581.93	-0-
Association boards	17,056.26	-0-
Related Association activities	1,797.44	-0-
Contingent fund	3,922.00	-0-
The Journal	42,402.14	-0-
Trustees' fees	-0-	13.20
Loss on sale of stock	-0-	497.50
TOTAL EXPENSES	$147,920.71	$510.70
EXCESS OF INCOME OVER EXPENSES	$ 10,845.07	$ 25.90

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Treasurer for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Treasurer as recommended by the Reference Committee on motion duly made and seconded.

Ninth District Councilor

CHARLES R. ANDREWS, JR., M.D., *Macon*

The 9th District Councilor has attended all the meetings of the MAG Council. The 9th District continues to be a well organized and very active district with excellent interest and attendance at the District meetings which are held twice a year; September meeting having been held in Canton and the April meeting in Gainesville. The latter being a program for accreditation by the AAGP.

Dr. Paul Scoggins, Vice-Councilor, is again to be commended for his sincere interest and excellent attendance at the Council meetings. Also one of the strong points of the 9th District Medical Society has been our excellent secretary, Dr. Hamil Murray, of Gainesville and our immediate past president, Dr. John H. Reed, Jr., of Gainesville.

As will be noted below the membership strength remains about the same and there have been no basic changes in the setup of the 9th District Society.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Blue Ridge				
Thomas J. Hicks				
McCaysville	8	4	10	6
Chattahoochee				
Cecil L. Miller				
Buford	19	17	20	16
Cherokee-Pickens				
John A. Cauble				
Canton	14	12	13	11
Habersham				
L. G. Hicks, Jr.				
Clarkesville	15	13	15	13
Hall				
R. Lowell Peacock				
Gainesville	50	43	53	48
Jackson-Barrow				
A. A. Rogers, Jr.				
Commerce	17	12	17	12
Rabun				
John E. Fowler				
Clayton	3	2	3	2
Stephens				
Irving D. Hellenga				
Toccoa	19	18	18	14
	145	121	149	122

C. R. Andrews
Councilor
Canton

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Ninth District Councilor for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Ninth District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Tenth District Councilor

ADDISON W. SIMPSON, JR., M.D., *Washington*

I am glad to report a very successful year for the 10th District. All component societies, with the exception of Warren, have been active. It is suggested that some way may be worked out where Warren may be consolidated with one of the other adjacent counties.

The District Society held two meetings—the summer meeting in Washington was fairly well attended and the program most informative; the winter meeting held in Athens, Georgia, offered a most excellent scientific program. It is of interest that the attendance in Athens far exceeded the attendance of the meeting in Augusta held last winter.

I would like to thank Dr. Marion Hubert, Vice Councilor for the 10th District, for helping me in the duties of Councilor in this District.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Crawford W. Long				
George Erwin				
Athens	58	47	53	41
Franklin-Hart-Elbert				
Sidney A. Garrett				
Hartwell	22	15	22	17
McDuffie				
John W. Lemley				
Thomson	7	6	8	7
Oconee Valley				
H. A. Thornton				
Greensboro	13	8	13	8
Walton				
J. H. Barton				
Social Circle	10	8	9	8
Warren				
H. B. Cason				
Warrenton	1	—	1	—
Wilkes				
J. E. Pollock, Jr.				
Washington	11	7	9	6
	122	91	115	87

Addison Simpson, Jr.
Councilor
Washington

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Tenth District Councilor for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Tenth District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Richmond County Councilor

HARRY D. PINSON, M.D., *Augusta*

During the past year I have attended all Council meetings. I have served on the Board of Insurance and Economics and on the Relative Value Study Subcommittee.

I have faithfully supported the recommendations of the National and State Legislative Subcommittees and have reported to my county society all efforts in this campaign.

I wish to emphasize that our efforts to defeat the

King-Anderson bill and all other similar legislation must be increased. We need the full support of every member of MAG.

Counties and Secretaries	Members December 31, 1963 MAG Total	Members December 31, 1963 AMA Dues Paying Only	Members December 31, 1962 MAG Total	Members December 31, 1962 AMA Dues Paying Only
Richmond Henry D. Scoggins Augusta	238	209	243	204

H. D. Pinson
Councilor
Augusta

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Richmond County Councilor for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Richmond County Councilor as recommended by the Reference Committee on motion duly made and seconded.

Richmond County Vice Councilor

J. L. Mulherin, M.D., *Augusta*

During the past year it has been my privilege to have attended most of the meetings of Council.

It is my opinion that the business matters of our Association have been handled in a very efficient manner by Council during the past year.

The headquarter's office personnel have again done a very commendable job.

I have no specific recommendations for the coming year.

REFERENCE COMMITTEE RECOMMENDATION — The committee approves and commends the Richmond County Vice Councilor for his report.

HOUSE OF DELEGATES ACTION — Adopted the report of the Richmond County Vice Councilor as recommended by the Reference Committee on motion duly made and seconded.

Public Service

Linton Bishop, Jr., M.D., *Chairman*

The Public Service Board has been active in several fields and has endeavored to carry out various projects established last year. A central clearing house for various public service projects has been established at the headquarters of the Medical Association of Georgia. The experiences of people over the State with various projects are now available to others to aid in planning and carrying out proposed public service endeavors. A considerable portion of our time has been spent endeavoring to better relationships with the news media throughout the State. We helped put Dr. Edward Annis, AMA President in contact with the news media and were pleased to see a factual question and answer session with Dr. Annis published in one of the widely read magazine sections of a local paper. We again sponsored the County Societies' Officers Conference which was quite successful. The theme of "Uncle, I Would Rather Do it Myself" was favorably received. We were fortunate in having Dr. Noah Langdale, President of Georgia State College, Governor Carl Sanders of Georgia, Mr. William Faulkner. President of the Woodman's Life Insurance Company of Lincoln, Nebraska and Dr. Ernest Howard, Executive Vice President AMA participate in our first day session. This conference was very worthwhile to the leaders participating and we would like to change the name of the conference to "A Conference for the Medical Leaders of Georgia." We also sponsored along with the Atlanta Division of The Food, Drug Administration a conference on "Health Quackery" with the several Southeastern States participating. This was an outstanding success and was enthusiastically received by the lay public, the press, and the professional people participating. The Public Service Board is also participating in a "Good Health for Georgia Campaign' 'in cooperation with the Georgia Dental Association, Georgia Pharmaceutical Association and the Georgia Hospital Association. This is being done under the auspices of the Association of Georgia Broadcasters and we hope will be successful in bettering the health of every Georgia citizen. This board would like to publicly thank Mr. Milton Krueger and the staff of MAG for a professional job, well done.

REFERENCE COMMITTEE RECOMMENDATION — This report was received as information only.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Public Service Board on motion duly made and seconded.

Public Service Subcommittee

Floyd R. Sanders, Jr., M.D., *Chairman*

During the past year the activity of this Subcommittee has revolved around the chairman's participation in the presentation of part of the program of the 6th MAG Annual County Society Officers Conference put on by the MAG Board of Public Service. The subjects to which the guest speakers addresesd themselves centered around—"Uncle, I'd Rather Do It Myself" and ' How We Do It Ourselves."

REFERENCE COMMITTEE RECOMMENDATION — This report was received as information only.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Public Service Subcommittee on motion duly made and seconded.

Weekly Health Column Subcommittee

J. Rhodes Haverty, M.D., *Chairman*

The Weekly Health Column Subcommittee is one of the most active committees of the Association. The committee meets quarterly and in 1963 fifty-two articles were submitted to the newspapers in Georgia for publication.

The articles are mailed to 232 weekly and daily newspapers, of which about 200 weekly papers publish the articles, and about 10 daily papers. The clipping service and reader response indicate the continued interest in this column. Readers are asked to send in comments and suggestions for future columns and at each meeting of the committee these are reviewed and the members attempt to write an article in answer to a request.

The Chairman would like to state that it is not easy to maintain member interest in the work of the committee in that it entails the writing of eight to ten articles per member during the year. Therefore, the Chairman has devised a rotating membership plan

whereby new members are appointed during the year in order to bring fresh talent into the work of the committee, and thus relieve those members who have served well. This plan has functioned well.

The Chairman recommends continuance of this project in the interest of serving the citizens of Georgia.

The Chairman also recommends for consideration that this committee, with the Chairman as editor, work up an anthology of these articles. The presently proposed plan would choose some 25 to 100 of the best articles which have appeared over the past several years. These articles would be rewritten and brought up to date where indicated, then published in an inexpensive form, probably with such a title as "Doc MAG says," to be bought by the general public. After expenses incurred are paid, the proceeds from this volume could go to whatever purpose the MAG might direct — perhaps to some educational project or charitable consideration.

At present the amount of monies involved, and the method of publication is not known, but contacts are being made, and plans are being worked out. Hopefully, this information will be available at the time the Reference Committee meets at the Annual Session in May, and will be presented at that time. Meanwhile, tentative favorable consideration is sought for this project, as presently stated.

In concluding this report, enough commendation and thanks cannot be given to Mrs. Catherine Wooten for her able help and guidance to this committee. Miss Edwina Davis performs admirably in her role as science writer, and also merits our sincere appreciation.

REFERENCE COMMITTEE RECOMMENDATION — This report was received as information only.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Weekly Health Column Subcommittee on motion duly made and seconded.

Supplementary Report of MAG Subcommittee on Medicine and Religion No. 1

SUBCOMMITTEE REPORT ON MEDICINE AND RELIGION

W. Harrison Reeves, M.D., *Chairman*

The MAG Subcommittee on Medicine and Religion was organized in the fall of 1963 in compliance with the AMA Department of Religion and Medicine request. This AMA Department, under the direction of Dr. Paul McCleave, has as its aim the cooperation of the doctor and the clergyman in total patient care. Fifteen faiths were selected to pilot the program and it is already underway in several states.

The organizational meeting of this committee was held on November 7, 1963, at the MAG Headquarters Building with nine members present. Dr. McCleave was also present to explain the program.

Our committee is now organized throughout the state with 26 members on this committee. Contact is being made with the county medical societies by the members of the committee so that the program can be put into operation by the first of next year. The program has already received some general attention in the Atlanta area. Interestingly enough there is a sister organization within the field of the ministry called the Georgia Association of Pastoral Care. This membership is made up at this time largely of ministers in the pastorate who have had clinical training, and chaplains. The aims are directed very much like our own and we have already had some communication between our two groups.

There is much attention already given by the individual practitioners throughout the state. We hope that we can not only stimulate this pre-existing personal interest but also organize it for the Medical Association into a more effective movement in the direction of total patient care.

REFERENCE COMMITTEE RECOMMENDATION — This report was received as information only.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the Supplementary Report I — Medicine and Religion Subcommittee on motion duly made and seconded.

Resolution No. 2

HONORARY MEMBERSHIP FOR HERMAN JONES, PH.D.

John T. Godwin, Fulton County Medical Society

WHEREAS, Herman Jones, Ph.D., has rendered outstanding service to the State of Georgia over the years as Director of the State Crime Laboratory, and

WHEREAS, throughout his career he has maintained the highest scientific and ethical standards, and

WHEREAS, he has always in the performance of his duties maintained the best possible relations with members of the Fulton County Medical Society and with members of other county medical societies and members of the Medical Association of Georgia and the Atlanta Society of Pathologists and the Georgia Association of Pathologists,

NOW, THEREFORE, BE IT RESOLVED that the Fulton County Medical Society hereby recommends Herman Jones for Honorary Membership in the Medical Association of Georgia in accordance with Section 7, Chapter I of the MAG Bylaws.

AND BE IT FURTHER RESOLVED THAT FCMS Delegates to the Medical Association of Georgia Annual Session in Macon May 3-6, 1964, be instructed to introduce this resolution at the First Session of the MAG House of Delegates.

REFERENCE COMMITTEE RECOMMENDATION — In reference to Resolution No. 2 presented by the Fulton County Medical Society, your Reference Committee approves the Resolution for Honorary Membershio in the Medical Association of Georgia for Herman Jones, Ph.D.

HOUSE OF DELEGATES ACTION — Adopted Resolution No. 2 — Honorary Membership for Herman Jones, Ph.D. as recommended by the Reference Committee on motion duly made and seconded.

It was moved by Reference Committee No. 1 Chairman Jules Victor, Jr., Savannah, and duly seconded, that the report of the Reference Committee be approved as a whole and it was so ordered.

Report of Reference Committee No. 2

William R. Birdsong, Macon, Chairman

(The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendation for action pursuant to it taken by the House of Delegates.)

Reference Committee No. 2 met in the Auditorium Main Meeting Room, Macon Auditorium, Macon, Georgia, at 2:30 P.M., May 4, 1964. Members present were: William R. Birdsong, Macon, Chairman; J. E. Cantrell, Albany, Vice Chairman; Frank L. Wilson, Jr., Atlanta, Secretary; Louis H. Griffin, Claxton; J. D. Bateman, Albany; Robert Wells, Atlanta; and W. W. Osborne, Savannah.

Speaker, House of Delegates

J. Frank Walker, M.D., *Atlanta*

Innovations are being instituted in the House of Delegates this year on a trial basis. The First Session of the House of Delegates will meet on Monday, rather than Sunday, to avoid competition with many other activities which occur on Sunday afternoon. Furthermore, all reference committees will meet at the same time on Monday in immediate proximity to one another. This "same time — same place" organization of the reference committees should assure the necessary attendance of those who should be present when their reports are discussed. Those with whom I consulted and I have high hopes for the effectiveness of this streamlining.

County medical societies are urged to select knowledgeable physicians as their delegates to the Medical Association of Georgia—Delegates who will attend and participate in the deliberations. Each year, several Delegates ignore the more important Second Session of the House of Delegates, where the voting on issues is accomplished. Although improvement has been made, some of the important smaller counties still do not avail themselves of representation in the House of Delegates.

All physicians, delegates or not, are needed at the deliberations of the various reference committees, when they are knowledgeable on the subjects at issue.

During the year, your Speaker and Vice-Speaker represent you at the meetings of the MAG Council. Each proposal of the House of Delegates, after study, and after consultation with Council as to disposition, is referred to the appropriate officer, staff executive, Board or Committee for action. These actions are reviewed several times during the year to determine whether or not the wishes of the House are being accomplished.

I am blessed with the caliber of Vice-Speaker represented by His Honor, Joe Mercer, M.D., Mayor of Brunswick.

REFERENCE COMMITTEE RECOMMENDATION — The committee approved the report with commendation particularly with reference to the change in time of the initial delegates meeting to Monday and the reference committees meeting in a central area.

HOUSE OF DELEGATES ACTION — Adopted the report of the Speaker of the House of Delegates as recommended by the Reference Committee on motion duly made and seconded.

Alternate Delegate

George R. Dillinger, M.D., *Thomasville*

Both A.M.A. Meetings were attended; The Atlantic City Annual Session and The Portland Clinical Session. The activities and effectiveness of the Georgia delegation is certainly enhanced by the presence of a full delegation of Delegates and Alternates. It is imperative that we continue to have an active delegation interested in the local and national policies of medicine.

Alternate Delegate

J. Frank Walker, M.D., *Atlanta*

The physicians of Georgia can be proud of the delegation which represented them at the two meetings (Atlantic City and Portland) of the House of Delegates of the American Medical Association during the past year.

American Medicine is very much aware of the dedicated Georgia group, which, this year, included, each time, enough representatives to adequately "man" the meetings of the numerous reference committees. Breakfast meetings, at the conventions, which are attended not only by Delegates and Alternates, but also by MAG officers and staff and individual interested physicians, constitute a very effective mechanism for consolidation of ideas and organization for activity. It is to Georgia's credit that other delegations, and, indeed, Councils of the AMA, have followed our lead in this activity. Such competition, however, has not reduced attendance at our breakfast meetings by key AMA staff members and officers.

Alternate Delegate

Preston D. Ellington, M.D., *Augusta*

I wish to express my deep gratitude for the opportunity to represent this House of Delegates and the members of the Medical Association of Georgia as Alternate Delegate to the American Medical Association House of Delegates. The deliberations of the House are of great significance to the Medical Association of Georgia members, to the public and, in fact, to all physicians. In my opinion it is one of the great deliberative bodies in the world today.

As Alternate Delegate at the Annual Session held in Atlantic City in June 1963 I attended all sessions of the House of Delegates, the breakfast meetings of the Georgia delegation for review and comment on all reports, and attended all assigned reference committee meetings. I was profoundly impressed with the tremendous impact and responsibility this House of Delegates has in shaping the present and future destiny of medicine in the United States and even throughout the world. I feel that all physicians should be aware of the scope of its interests and the details of its accomplishments but I am not confident that this concern and awareness has permeated through our county medical societies to the individual physician. As a step in this direction I believe that all of the annual reports of the AMA activities are "must reading" for every member of our House of Delegates.

The extensive amount of work to be accomplished at these sessions demands maximum representation and I would urge implementation of the recommendations made last year that the Alternate Delegates be provided with the same stipends for each session of the House of Delegates of the American Medical Association as are provided for the delegates. I am confident that this action would greatly facilitate the work of the Georgia delegation.

From personal experience I can assure the membership of the Medical Association of Georgia that its interests are well represented through the untiring efforts of our Delegates, Drs. J. W. Chambers, Henry Tift, and Eustace Allen. The officers of the Medical Association of Georgia and the staff are to be especially commended for their work with the delegation at these meetings.

As Alternate Delegate I have also attended all of the Medical Association of Georgia Council meetings and special conferences. It is my intention to attend the 1964 Annual Session to be held in San Francisco in June and I greatly appreciate this privilege afforded me by the members of the Medical Association of Georgia.

REFERENCE COMMITTEE RECOMMENDATION — The AMA Alternate Delegates reports were considered and on motion by Dr. Osborne and seconded by Dr. Bateman, it was voted that the Alternate Delegates to the AMA will be reimbursed full expense when and if feasible financially, and this will be determined by Council. The remaining portion of Dr. Preston Ellington's report was accepted with commendation. Dr. Dillinger's and Dr. Walker's reports were accepted with commendation.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the AMA Alternate Delegates on motion duly made and seconded.

First District Councilor

CHARLES E. BOHLER, M.D., *Brooklet*

I have attended all regular and called meetings of Council since the last Annual Session.

I feel we of the First District have done a good job during the past year with respect to keeping our State and national elected representatives aware of our wishes and feelings regarding proposed or impending legislation.

I have met with several of the societies in my district during the past year and have attempted to keep them abreast of M.A.G. activities and policies.

The First District meeting was held on April 22, at the Forest Heights Country Club in Statesboro, Georgia.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Bulloch-Candler-Evans				
Albert M. Deal				
Statesboro	16	14	19	17
Burke				
Charles G. Green				
Waynesboro . . .	8	6	7	5
Emanuel				
C. E. Powell				
Swainsboro	7	6	7	6
Jenkins				
A. F. Mulkey				
Millen	3	2	3	3
Screven				
G. B. Hogsette				
Sylvania	5	5	7	7
Southeast Georgia				
L. C. McRae				
Glenwood	26	20	24	19
Tri-Liberty-Long-McIntosh				
O. D. Middleton				
Ludowici	3	2	5	4
	68	55	72	61

Charles Bohler
Councilor
Brooklet

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted the report of the First District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Georgia Medical Society Councilor

WALTER BROWN, M.D., *Savannah*

The Georgia Medical Society has enjoyed active, interesting and progressive year. The scientific programs are constantly improved and our program committee has gone to great effort to obtain prominent speakers.

The most outstanding event of our year was the two day visit to our Society and community by Dr. Edward Annis, President of the American Medical Asociation. He was received with enthusiasm by our Society and by the community at large.

Our Society attendance continues to improve due to the above mentioned factors and also to a most pleasant social hour preceding our meetings.

We have attended all meetings of the Council and special call meetings as indicated.

Our legislative committee has been particularly active as recently indicated by having our local legislators support our Medical Association of Georgia stand in reference to retaining the present set up of the State Board of Health.

Dr. A. F. Williams is our President, succeeding Dr. Charles Prince who enjoyed a most successful year.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Georgia Medical Society				
Jeff J. Holloman				
Savannah	155	141	152	137

Walter Brown
Councilor
Savannah

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted the report of the Georgia Medical Society Councilor as recommended by the Reference Committee on motion duly made and seconded.

Georgia Medical Society Vice Councilor

T. A. PETERSON, M.D., *Savannah*

As Vice Councilor, Georgia Medical Society, I have been unable, as the result of important personal matters, to attend any of the Council meetings during the year 1963-64.

REFERENCE COMMITTEE RECOMMENDATION — Approved.

HOUSE OF DELEGATES ACTION — Adopted the report of the Georgia Medical Society Vice Councilor as recommended by the Reference Committee on motion duly made and seconded.

Second District Vice Councilor

JAMES C. BRIM, M.D., *Pelham*

As Vice-Counselor in the Second District, please accept this as my report.

It has been my educational and extreme pleasure to socially attend the meetings of the Medical Association of Georgia Council that were held during the year 1963. The Vice Councilor has taken part in all of the meetings, except one. He has participated in the discussions and the activities of the Council at each meeting. The Councilor and the Vice-Councilor have returned to the Second District Medical Society Meetings, as well as their Hospital Staff meetings and brought to them any pertinent information concerning the operations of the State Medical Association and any problems that might be arising during the year. He has tried to stimulate thoughts and interest on all problems pertaining to the interest of the District as well as to the State Medical Association and asking that the individual physicians, as well as the societies and the organizations as a whole contact the Representatives, the Senators and Congressman, in respect to each political problem that needs attention.

I feel that the extension of the Second District Medical area, bringing in these several counties that are now brought into our District will be an asset to our operations. It may be that the thoughts and minds of the good men from these counties will be an asset to the district organization in that a more concentrated effort can be developed to handle such problems that arise pertaining to the functions of the society and the Medical Association.

It has been my pleasure to attend these interesting meetings and I assure you that it has been a pleasure for Mrs. Brim also.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Colquitt				
Walter E. Harrison				
Moultrie	20	18	19	16
Decatur-Seminole				
M. A. Ehrlich				
Bainbridge	16	13	17	15
Dougherty				
John D. Bateman				
Albany	55	44	53	42
Grady				
Martin Bailey				
Cairo	5	5	5	5
Mitchell				
A. A. McNeill, Jr.				
Camilla	8	8	11	9
Southwest Georgia				
R. E. Jennings				
Arlington	12	11	14	12
Thomas-Brooks				
Julian B. Neel				
Thomasville . . .	44	35	46	40
Tift				
F. Morris Davis				
Tifton	15	10	15	10
Worth				
H. G. Davis, Jr.				
Sylvester	4	4	4	4
	179	148	184	155

W. Frank McKemie
Councilor
Albany

REFERENCE COMMITTEE RECOMMENDATION — The Second District Vice Councilor's report was accepted with the recommendation that note be made of the loss of active membership in the various districts.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Second District Vice Councilor on motion duly made and seconded.

Council of MAG

ADDISON W. SIMPSON, JR., M.D., *Chairman*

The year 1963-64 has been a busy one for Council. I wish to thank all members for their unselfish devotion to duty, as evidenced by the time each gave through attendance of the meetings and for their advice and assistance in the solution of the many problems of the Association.

Special commendation is due the Treasurer and Finance Committee who contributed untold hours of their time. The results of these labors will be seen in the final reports which will be presented to you.

If this report appears brief, it is due to the fact that excellent reports have been submitted by the various Boards and Committees, and I see no need for duplication.

Pertinent items and actions of Council of special importance to the House of Delegates through the Association year 1963-64 are listed below for consideration by the House.

I. MAG Employees Pension Plan was instituted. The complicated details of this plan are available at State MAG Headquarters.

II. Council diligently reviewed and studied all recommendations from the House of Delegates 1963 Meeting to see that these actions were implemented where possible.

III. Physicians participating in drug repackaging house finance or operation has been ruled unethical by the Judicial Council of AMA. It is felt that all members of MAG should be notified of this fact and that they should immediately divest themselves of all such interests.

IV. The legal retainer fee was increased from $2,400 to $3,600 per annum to conform with services provided.

V. GaMPAC — The following resolution was passed by Council: " Whereas, there is a great need for a strong political action committee in Georgia, and, whereas GaMPAC provides the mechanism through which this desirable objective may be accomplished, now, therefore, be it resolved that the Council of the Medical Association of Georgia does hereby go on record as endorsing the Georgia Medical Political Action Committee and be it further resolved that the Chairman of Council is hereby requested to seek en-

dorsement of GaMPAC by the MAG House of Delegates at the 1964 Annual Session through its Annual Report to the House of Delegates."

As Chairman of Council and personally, let me take this opportunity to request the House of Delegates to urge all members of MAG to identify themselves with GaMPAC through their active participation in same.

VI. The *Journal* subscription rate was raised from $5 per year to $7 per year, as one measure to help meet the increased publication cost.

VII. The Medical Defense Report will be covered by the Report of this Subcommittee. It is of interest to note that rates have been reduced.

VIII. Council requests the House of Delegates to urge all members to join AMA. The benefits are many and MAG representation in the AMA House of Delegates is determined by our participation in AMA through dues-paying members.

IX. MAG Boards and Subcommittees in some instances have not carried out their intended duties. It is felt that in most instances, this is the result of lack of understanding of the duties of the Board or Committee and of the job to be done. It is suggested by Council that shortly after the Boards, Committees and Subcommittees are appointed, a meeting should be held in July with the Chairman of the Boards and the Executive Committee, to outline the activities of the Boards. The following suggestions are also made. (1) The Chairman of the Board should submit the yearly budget for his Board and Subcommittees. (2) The Chairman of the Board should be stimulated to call meetings of his Board and Subcommittees at least twice a year unless it is necessary to meet more often to carry out the business of the Association.

After the July meeting with Board Chairmen, these Chairmen are to submit their yearly project reports at the September Council meeting and the results of their year's activities at the March Council meeting.

X. The question of ad valorem taxes on Association property in Atlanta is still pending.

XI. It is urged that better liaison between the dentists, pharmacists, and veterinarians be established. As one method of so-doing, it is suggested that the President and President-Elect of the Georgia Dental Association, the Georgia Pharmaceutical Association, and the Georgia Veterinary Medical Association be made honorary members of the MAG and be invited to attend our Annual Sessions.

XII. A very extensive amount of time was devoted by Council and the Executive Committee of Council to the problems of Legislation. The details will be covered by the Report of the Legislative Board.

XIII. Finance — (A) The 1964 MAG Budget is presented in the Report of the Finance Chairman. (B) The fiscal affairs of MAG are covered by audit in the Treasurer's Report.

XIV. A request by the Georgia Chapter of the American Academy of Pediatrics and by the Georgia Academy of General Practice is made to Council, requesting that Council request the House of Delegates to instruct its Legislative Board to seek passage of Legislation for the prevention of physical abuse to children. Such Legislation, in broad terms, would provide for (1) the mandatory reporting of all suspicious child abuse cases not explained by medical history; and (2) granting of immunity from criminal and civil liability to those individuals required by law to make these reports.

Chapter X, Section 3(j) of the MAG Constitution and Bylaws provides that the Board on Constitution and Bylaws shall recommend any and all amendments to the Constitution and Bylaws through the MAG Council. The report of this Board is found elsewhere in the Delegates Handbook. At the conclusion of their report you will find certain recommendations of Council with respect to specific proposed changes offered by the Constitution and Bylaws Board.

REFERENCE COMMITTEE RECOMMENDATION — Appraved with cammendatian and in Sectian V of the repart "GaMPAC," it was recammended that the fallawing Resalutian be passed:

"WHEREAS, there is a great need far a strong palitical actian cammittee in Georgia, and,

WHEREAS, GaMPAC provides the mechanism thraugh which this desirable abjective may be accamplished,

NOW, THEREFORE, BE IT RESOLVED that the House af Delegates af the Medical Assaciatian af Geargia daes hereby ga on record as endarsing the Geargia Medical Palitical Actian Cammittee."

HOUSE OF DELEGATES ACTION — Adopted the report af the Caunail as recammended by the Reference Cammittee with the additianal recammendatians af the Reference Cammittee an matian duly made and secanded.

Constitution and Bylaws

W. G. Elliott, M.D., *Chairman*

The Board of Constitution and Bylaws met September 9, 1963, for the consideration of five problems. The following are the recommendations of this report.

PROPOSAL NO. I. RESOLVED that Chapter IV, Section 1, of the Bylaws be amended by changing the words "to elect" in the second sentence to read "to have" and by changing the words in these elections appearing at the beginning of the third sentence thereof, to read "in nominating such Councilor and Vice Councilor", and by adding the words "and Vice Councilor" after the word "Councilor" in the third sentence.

PROPOSAL NO. II. RESOLVED that Chapter IV, Section 1, of the Bylaws be amended by inserting at the end of the second sentence the following: "When any component County Medical Society has an active membership of 400, such component Society shall have the privilege of nominating a second Councilor and Vice Councilor directly representing that Society. In the event that any component County Society attains an active membership of 1,000 such Society shall then have the privilege of nominating a third Councilor and Vice Councilor directly representing that Society. In any district where there is a component County Medical Society having 100 or more members and there are not at least 50 other members in good standing in the remainder of the district, then just one Councilor and Vice Councilor shall be nominated to represent the district at large and no nominations shall be made by such component County Medical Society with 100 or more members. In any district where there are two or more component County Societies each having 100 or more members, then the Society with the largest mem-

bership shall nominate a Councilor and Vice Councilor to represent such Society and no other component Society in the district shall be entitled to do so until such time as there would be a minimum of 50 members in good standing in the remainder of the district.

PROPOSAL NO. III. RESOLVED that Chapter V, Section 2, of the Bylaws be amended by adding the following paragraph at the end of said Section 2: "If a Councilor dies, resigns, or is unable to fill effectively the office of Councilor because of physical incapacity, he shall be succeeded in such office until the next Annual Session by the Vice Councilor of the District Society or the component County Medical Society which nominated him. If a Vice Councilor dies, resigns, or is unable to fill effectively the office of Vice Councilor because of physical incapacity, or is serving as Councilor pursuant to the provision of the immediately preceding sentence of this section, until the next Annual Session, the person to fill the vacancy so created shall be the President, Vice President, or Secretary in that order of succession, of the District Society or the component County Medical Society which nominated the Vice Councilor whose office is being filled, provided that if the first such officer in the order of succession is already serving as Councilor or declines to serve, then the next succeeding officer in the line of succession shall serve as Vice Councilor until the next Annual Session. Both the new Councilor and Vice Councilor shall only serve until the next Annual Session, at which time nominations from the District Society or the component County Society will be presented for election to fill out the balance of the term for which the original Councilor or Vice Councilor was elected. Such interim nominations shall be forwarded in like manner as regular nominations for Councilor and Vice Councilor."

PROPOSAL NO. IV: RESOLVED that Chapter VI, Section 3, of the Bylaws be amended by deleting the fourth sentence reading as follows: "The Vice President shall not have the privilege to vote, except in the case of the death of the President or his incapacity as determined by the Council upon the recommendation of the Executive Committee."

PROPOSAL NO. V: RESOLVED that Chapter III, Section 2, of the Bylaws be amended by adding at the end of Section 2 the following additional paragraphs:
"The full time M.D. faculties of the Medical College of Georgia, and Emory University School of Medicine may each elect one delegate and one corresponding alternate delegate who must be a Doctor of Medicine serving in a full time faculty position, and who must be a member of the Medical Association of Georgia in good standing at the time of election and during the term of office.
The above delegates and corresponding alternate delegates shall represent the full time M.D. faculties of such Medical Schools and shall be elected for a term of three (3) years.
"The Georgia Chapter of American Association of Public Health Physicians may elect one delegate and corresponding alternate delegate who shall be a member of the Medical Association of Georgia in good standing at the time of election and during the term of office. Such delegate and corresponding alternate delegate shall represent the doctors of medicine serving as State Public Health Officers and shall be elected for a term of three (3) years."

As amended by Proposals No. I and No. II, Chapter IV, Section 1, would read as follows: "The Council is composed of the President, the President Elect, the Immediate Past President, two Vice Presidents, Secre- of the House of Delegates, and one Councilor or Vice tary, Speaker of the House of Delegates or Vice Speaker Councilor from each Councilor District.

"Component County Medical Societies having 100 or more active members shall be entitled to have one Councilor and one Vice Councilor directly representing that Society. When any component County Medical Society has an active membership of 400, such component Society shall have the privilege of nominating a second Councilor and Vice Councilor directly representing that Society. In the event that any component County Society attains an active membership of 1,000, such Society shall then have the privilege of nominating a third Councilor and Vice Councilor directly representing that Society. In any district where there is a component County Medical Society having 100 or more members, and there are not at least 50 other members in good standing in the remainder of the district, then just one Councilor and Vice Councilor shall be nominated to represent the district at large and no nominations shall be made by such component County Medical Society with 100 or more members. In any district where there are two or more component County Societies each having 100 or more members, then the Society with the largest membership shall nominate a Councilor and Vice Councilor to represent such Society, and no other component County Society in the district shall be entitled to do so until such time as there would be a minimum of 50 members in good standing in the remainder of the district. In nominating such Councilor and Vice Councilor, only members of the component County Medical Society involved shall be allowed to vote and in those districts which contain a large County Medical Society having 100 or more active members, only those members residing in the district outside the large County Medical Society may vote for the Councilor and Vice Councilor representing that district. Vice Councilors shall be ex-officio members of Council without the right to vote except in the absence of their respective Councilor when they shall serve as Councilors. The Vice Speaker shall be an ex-officio member of Council without the right to vote except in the absence of the Speaker when he shall serve in the Speaker's stead. Delegates to the American Medical Association, the Treasurer, Editor of the Journal, and the Executive Secretary shall be ex-officio members of Council without the right to vote."

This report was submitted to Council at its December meeting. The Council disapproved Proposal No. II, and recommended that this be deferred until after the redistricting of the State has been settled by the Georgia General Assembly.

In February 1964, it was brought to the attention of the Board of Constitution and Bylaws the following: There has been some discussion in Executive Committee of Council, brought about by the proposed change in the State Board of Health composition, and other matters which arise at times, at which time decisions have to be made in a short period of time, as to whether the Executive Committee should have more policy making authority between meetings of Council. In certain in-

stances it would seem that it should, but, that is a decision to be made through recommendation of the Constitution and Bylaws Board.

After discussion on this subject at the February 8th meeting of the Executive Committee, it was voted to refer this matter to the Constitution and Bylaws Board for study and report back to the Executive Committee. The members of the Board of Constitution and Bylaws were contacted by mail and the following recommendation was made to Council. To amend the Constitution: Chapter IV, Section 3. Executive Committee.

After, (subject to approval) line 29, insert the following: "The Executive Committee between meetings of Council, shall have the authority and power of Council, in the field of legislative activity.

Recommendation of Council

Proposal number II of the Committee on Constitution and Bylaws was tabled by the Council at its meeting on March 14-15, 1964, in the belief that it would be wise to defer action on this proposed change until the matter of Congressional redistricting was more settled.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee recommended that Proposal No. I, No. II, No. III, and No. IV be approved. On Proposal No. V, the Committee recommends that the first two paragraphs and the first two sentences of the second paragraph be rejected. The specific portion of Proposal No. V which the Committee recommends be rejected reads as follows:

"PROPOSAL NO. V: RESOLVED that Chapter III, Section 2, of the Bylaws be amended by adding at the end of Section 2 the following additional paragraphs: 'The full time M.D. faculties of the Medical College of Georgia, and Emory University School of Medicine may each elect one delegate and one corresponding alternate delegate who must be a Doctor of Medicine serving in a full time faculty position, and who must be a member of the Medical Association of Georgia in good standing at the time of election during the term of office. The above delegates and corresponding alternate delegates shall represent the full time M.D. faculties of such Medical Schools and shall be elected for a term of three (3) years. The Georgia Chapter of American Association of Public Health Physicians may elect one delegate and corresponding alternate delegate who shall be a member of the Medical Association of Georgia in good standing at the time of election and during the term of office. Such delegate and corresponding alternate delegate shall represent the doctors of medicine serving as State Public Health Officers and shall be elected for a term of three (3) years."

The reason for this recommendation is that representation is available to these groups through their county medical societies. We further recommend that these county medical societies encourage election of this category of physician to these positions.

HOUSE OF DELEGATES ACTION — Speaker Walker recognized Delegate T. A. Sappington of Thomaston, who spoke against the Reference Committee recommendation on the rejection of Delegates to MAG from the Medical Schools and the State Public Health Officers. On a substitute motion proposed by Dr. Sappington and seconded by Dr. Jolley, it was moved that the House of Delegates adopt the original recommendation of the Constitution and Bylaws Committee in favor of the Medical Schools and State Health Officers being given Delegates to the MAG House of Delegates. After due discussion, the Speaker called for a vote and the substitution motion was disapproved. The House then adopted the Reference Committee recommendation in the rejection of Proposal No. V. The House of Delegates also adopted Proposal No. I; Proposal No. II; Proposal No. III; Proposal No. IV, as proposed by the Constitution and Bylaws Committee and recommended for approval by the Reference Committee. The House also approved the Reference Committee recommendation that County Medical Societies encourage election of Medical School faculty physicians and State Health Officers as county society representatives to the MAG House of Delegates.

Finance

VIRGIL B. WILLIAMS, M.D., *Chairman*

The Finance Committee met at the Headquarters Building in late 1963 and prepared the proposed budget for fiscal year 1964. This budget with modification was approved by Council.

The Chairman of the Finance Committee has attended all meetings of the Executive Committee and of Council during the year. At all times the Finance Committee has been ready and available to discuss with members of Council any matters pertaining to the finances of the Association. The Chairman of the Finance Committee wishes to thank all Boards and Committees for their splendid cooperation in furnishing information necessary for the preparation of the budget.

	1963 Budget	*Actual Jan. 1-Nov. 30, '63*	*1964 Proposed Budget*
INCOME			
I. (a) MAG Dues	$105,000,00	$109,630.00	$112,829.13
(b) Int. & AMA	2,000.00	3,640.24	4,000.00
(c) GP Service	3,250.00	2,979.13	3,250.00
II. Annual Session	8,750.00	9,225.00	8,750.00
III. Journal	41,000.00	25,641.64	35,000.00
IV. Trans. fr. Oper. Capital	5,000.00	—	—
Total Income	$165,000.00	$151,116.01	$163,829.13
EXPENSES			
I. (a) Fixed Allot.	$ 13,625.00	$ 6,735.66	$ 14,625.00
(b) Assoc. Office	72,903.39	57,796.03	80,565.00
(c) Assoc. Boards	21,005.00	14,011.28	20,100.00
(d) Related MAG Act.	1,300.00	1,225.11	1,400.00
(e) Cont. Fund	4,126.61	—	—

	1963 Budget	Actual Jan. 1-Nov. 30, '63	1964 Proposed Budget
(f) Cont. (Tr. Fr. Oper. Capital)	5,000.00	6,435.44	—
II. Journal	47,040.00	36,179.69	47,139.13
Total Expenses	$165,000.00	$122,383.21	$163,829.13
I. (a) FIXED ALLOTMENTS			
Payment on Mort.	$ 4,000.00	$ —	$ 4,000.00
Int. on Mort.	1,150.00	—	950.00
MAG Atty. Ret.	2,400.00	1,800.00	3,600.00
MAG Atty. Expenses	300.00	410.66	300.00
Woman's Auxiliary	1,875.00	1,875.00	1,875.00
Pension Payments	2,400.00	1,650.00	2,400.00
Pres. Honorarium	1,000.00	500.00	1,000.00
Annual Audit	500.00	500.00	500.00
(A) Sub-Total	$ 13,625.00	$ 6,735.66	$ 14,625.00
(b) ASSOCIATION OFFICE			
Salaries	$ 42,667.50	$ 35,317.65	$ 51,240.00
Ins. & Bonds	1,585.89	1,109.04	1,050.00
Payroll Taxes	1,500.00	1,256.08	1,750.00
Travel:			
Office	4,000.00	3,291.70	3,500.00
Del. Sec. to AMA Annual & Clinic	3,000.00	2,133.70	3,000.00
Alt. Del.	1,200.00	667.18	1,200.00
Main. & Repair:			
Building	750.00	760.72	750.00
Equipment	750.00	452.57	500.00
Tel. & Tel.	4,000.00	3,351.83	4,000.00
Depreciation:			
Building	2,000.00	—	2,000.00
Equipment	650.00	—	650.00
Postage	3,000.00	2,585.93	3,000.00
Office Supplies	2,750.00	2,411.80	2,750.00
Jan. Serv. & Grat.	1,550.00	1,387.50	1,600.00
Meetings	800.00	611.36	800.00
Dues & Sub.	300.00	350.00	375.00
Heat, Lights, Water	2,100.00	1,818.35	2,100.00
Sundry	300.00	290.62	300.00
(B) Sub-Total	$ 72,903.39	$ 57,796.03	$ 80,565.00
(c) ASSOCIATION BOARDS			
1. *Annual Session*	$ 9,300.00	$ 7,469.91	$ 8,600.00
2. *Constitution and Bylaws*	—	—	—
3. *Hospital Activities*	—	—	50.00
a. Blood Banks	175.00	153.65	150.00
b. Hospital Rel.	100.00	—	50.00
4. *Governmental Med. Sev.*	—	—	50.00
a. Crippled Child.	—	—	—
b. Dis. Med. Care	200.00	41.51	200.00
c. Mat. & Inf. Wel.	500.00	124.18	300.00
d. Pub. Health	—	—	—
e. Rehabilitation	—	—	—
f. Sch. Cld. Hlt.	1,925.00	331.27	1,925.00
g. Vet. Affairs	50.00	—	50.00
5. *Ins. and Econs.*	1,000.00	396.18	500.00
a. Rel. Val. Stdy.	800.00	800.00	1,000.00
6. *Interprof. Rel.*	125.00	125.00	125.00

	1963 Budget	Actual Jan. 1-Nov. 30, '63	1964 Proposed Budget
7. *Legislation*	2,425.00	2,425.00	2,500.00
a. Nat. Leg.	—	—	—
b. State Leg.	—	—	—
8. *Med. Education*	—	—	100.00
a. AMA-ERF	25.00	—	—
b. Clks. Labs.	—	—	—
c. Med. Sch. C.	—	—	—
d. Med. Edu.	—	—	—
9. *Occup. Health*	—	—	300.00
a. Ins. Hlt.	—	—	—
b. Rul. Hlt.	—	—	—
10. *Public Service*	—	—	—
a. Public Ser.	2,000.00	1,314.78	1,900.00
b. Wky. Hlt. Clm.	1,730.00	804.57	1,600.00
c. Med. & Rel.	—	—	100.00
11. *Special Acct.*	—	—	—
a. Hlt. Care Ag.	500.00	25.23	500.00
12. *Vol. Hlt. Agencies*	—	—	—
a. Cancer	150.00	—	50.00
b. Mental Hlt.	—	—	50.00
(C) Asoc. Bds. Total	$ 21,005.00	$ 14,011.28	$ 20,100.00
(d) REL. MAG. ACTIVITIES			
AMA Del. Meet.	$ 400.00	$ 474.69	$ 400.00
Med. Defense	300.00	178.65	300.00
Phy. Law Liaison	—	—	—
Prof. Conduct	—	—	100.00
SAMA	500.00	500.00	500.00
SMEB	100.00	71.77	100.00
(D) Sub-Total	$ 1,300.00	$ 1,225.11	$ 1,400.00
(e) CONTINGENT FUND	$ 4,126.61	—	—
(f) "(Transfer from Oper. Capital)	5,000.00	—	—
1. Med. Educ.	—	$ 84.74	—
2. AMA Med. Sym.	—	256.78	—
3. Sch. Chd. Hth	—	340.91	—
4. Fldg. & Insert Mch.	—	1,859.41	—
5. Ga. Hosp. Med. Coun.	—	500.00	—
6. Spe. Atty. Fees	—	1,500.00	—
7. Ga. Soc. of Exec.	—	18.75	—
8. Leg. Comm.	—	292.27	—
9. Rural Health	—	153.92	—
10. Retirement Plan	—	1,000.00	—
11. Relative Value	—	428.66	—
Total	$ 9,126.61	$ 6,435.44	—

II. JOURNAL

Expenses:			
Printing	$ 35,000.00	$ 26,093.74	$ 35,000.00
Salaries	7,020.00	6,335.00	7,290.00
Bonus	605.00	—	722.50
Insurance	160.00	119.61	160.00
Payroll Taxes	355.00	251.04	366.63
Engr. & Cuts.	1,500.00	1,485.67	1,500.00
Sales Tax	1,050.00	777.19	1,050.00
Postage	500.00	500.00	300.00
Stationery	300.00	315.18	350.00
Clip. Serv.	250.00	175.50	200.00
Add. & Sup.	250.00	104.45	150.00
Sundry	50.00	22.31	50.00
TOTAL	$ 47,040.00	$ 36,179.69	$ 47,139.13

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted the report of the Finance Committee as recommended by the Reference Committee on motion duly made and seconded.

Legislation

SAMUEL U. BRALY, M.D., *Chairman*
J. FRANK WALKER, M.D., *Chairman*
National Legislation
JOHN A. BELL, JR., M.D., *Chairman*
State Legislation

The demands made by the legislative program of MAG upon physicians in Georgia continued without letup during 1963-64, and the end is not in sight. The inescapable conclusion of the past 12 months' activity is that legislative affairs, State and national, will grow rather than diminish in the years immediately ahead. Few if any of the activities of the Association have a more profound or immediate effect upon the membership of MAG than does its legislative program.

At the outset of this report your Board and its Subcommittees wish to express their appreciation to the many physicians who have contributed to the solution of many of our problems during the past year. Without their support this report might well have been a gloomy one.

NATIONAL LEGISLATIVE ACTIVITIES

Efforts in behalf of guiding the course of national legislation during the past 12 months can best be described by the expression "climate control." During this period the primary aim of the MAG national legislative program was to create a climate of non-acceptance of King-Anderson type legislation on the part of the lay public. To fertilize the soil of grass roots opposition to King-Anderson, your Subcommittee on National Legislation has sought to encourage implementation of all, or in certain instances, selected phases of "Operation Hometown;" a six point action program for county medical societies. It has continued to promote public speaking to lay groups as the ideal method by which to solicit support from the laity.

For the greater part of 1963 the Administration sponsored King-Anderson bill failed to generate much enthusiasm or activity on the part of the Congress. In November of 1963 the Ways and Means Committee held hearings on this legislation. MAG was one of eight State Medical Associations selected to document its case against H.R. 3920 (King-Anderson) before the full Ways and Means Committee of the House of Representatives. As you will recall these hearings were interrupted and subsequently postponed until early 1964 by the untimely and tragic death of President Kennedy. The ascendancy of the Vice President to the office of President has resulted in an invigorated interest in the King-Anderson bill. It has also resulted in an increased possibility of enactment during 1964.

To offset the greater likelihood of Congressional action on this bill, your Subcommittee has greatly intensified its "letter writing" campaign, its public indoctrination program (through public speaking) and in short sought to shore up our defenses against King-Anderson where indicated.

Following the 1963 session of the House of Delegates the Subcommittee on National Legislation sponsored the Fifth Annual Congressional Luncheon in Washington for members of the Georgia Delegation in the Congress and their wives. Our customary format calls for one physician from each of the State's Congressional districts to attend this luncheon as the personal host for his Congressman and the Congressman's wife. This year's Luncheon was held on April 16th and was rated a success by physician and Congressman alike.

Your Board and its National Legislative Subcommittee wishes to thank Congressman Robert G. Stephens of the 10th District for making the necessary arrangements to hold this luncheon meeting in the Speaker's Dining Room at the Capitol. The annual meetings in Washington over the past six years have been tremendously successful and are perhaps MAG's best Congressional relations effort. It is recommended that they be continued and that ways and means be explored to enlarge upon them in the future.

STATE LEGISLATIVE ACTIVITY

One of the highlights of the 1964 session of the General Assembly was an address by AMA President, Dr. Edward Annis, to a joint meeting of the House and Senate. Dr. Annis was well received and did much to set the stage for a successful year in State legislation.

Many factors contributed to the increased interest in State legislation during 1964. Chief among these contributing factors probably, was the introduction of legislation to change the composition of the State Board of Health and to recodify (also write new law) existing health laws in Georgia.

Attempts at recodification of the health laws was not new. This legislation was introduced several years ago and has been before the General Assembly in one form or another ever since. What was new, however, was an attempt to give political color to the Board of Health through wholesale reorganization of both the composition and method of appointment.

Following an unsuccessful attempt to enact this bill at the 1963 session of the General Assembly, an Interim Committee of the House and Senate was appointed to study this legislation for a year and report back to the 1964 Legislature.

Representatives of your Board met with this Study Committee on numerous occasions during the fall of 1963 in an effort to perfect the language of the bill.

The Interim Committee ultimately reported this bill back to the House Hygiene and Sanitation Committee with a recommendation that the Board of Health be reduced from 15 to 11 members, five of whom would be physicians and six of whom would be outright political appointments made by the Governor.

The Hygiene and Sanitation Committee then amended the bill further to provide for a 17-man Board of Health with only five physicians. As a result, the bill was totally unacceptable to MAG and the most ponderous legislative campaign of 1963-64 was launched.

In the final analysis MAG was able to muster enough votes to have stricken from the bill those objectional features relating to the composition and method of appointment of the Board of Health. For this success MAG is indebted to hundreds of physicians throughout the State and your Board wishes to acknowledge this debt here.

For the third time in as many years the Georgia Podiatry Association sponsored legislation to provide for the compulsory coverage of their services by the Blue Shield plans in Georgia. This same bill, tabled during the 1963 session of the Legislature, was recommitted to the House Insurance Committee on the first day of the '64 session. Near the end of the 40 day session this bill was reported out of the Insurance Committee to the Rules Committee, placed on the House Calendar and called up for a vote, all in the span of three days. Following House debate, on a motion to table (made by a Representative from a county without a physician) this bill was laid aside for the balance of the year.

This past session of the General Assembly was not a carry-over session. Consequently the podiatry bill or any other bill would have to be reintroduced again next year and go the entire committee route before it could be called up in the House or Senate for a vote. In all probability that is what will happen. Your Board recommends a continued education program by individual physicians with their respective representatives in the General Assembly on the matter Blue Shield coverage for podiatrists.

Another bill of general interest to MAG was one offered by the Osteopathic Association which sought to bestow full practice privileges upon all D.O.'s in Georgia. Almost immediately following introduction and referral of this bill to the Senate Health and Welfare Committee it was assigned to a subcommittee and there died. Following closely on the heals of the Senate bill, an osteopath bill was introduced in the House. The House bill was allegedly for the purpose of "upgrading" the requirements of candidates for the osteopathic State Board examination. At the time this bill was called up for a vote, two House members, both physicians, attacked the bill charging that it was being offered for the purpose of creating an illusion of self-improvement, when in fact, no real improvement was being made. The results of their efforts was that the bill failed to receive a constitutional majority of 103 votes necessary for the passage of any bill.

Legislation sponsored by the Board of Regents drew considerable attention from the Subcommittee on State Legislation. This particular bill was for the purpose of creating a State Scholarship Commission. It was passed late in the session. The purpose of the Commission will be to award scholarships in the paramedical, professional and educational field. This bill does not supersede or in any way effect present law as it relates to medical scholarships awarded by the State Board of Medical Education.

Although the bill was passed by the General Assembly it cannot become law until after a constitutional amendment on the same subject is ratified by the people.

It had been hoped during the early days of the '64 session that an Administration sponsored Supplemental Appropriations Act with sufficient monies for the implementation of the MAA provisions of the Kerr-Mills program would be offered. MAG was greatly encouraged when a petition was circulated among members of the House for the purpose of ascertaining and demonstrating support for such a spending measure. This, however, was to no avail. Since adjournment of the General Assembly, verbal assurances have been given by the Governor that he will seek the additional money needed for the expansion of this program at the 1965 session of the General Assembly.

Inasmuch as all members of the General Assembly are up for reelection this fall, your Legislative Board recommends that all County Medical Societies and all members of MAG seek support for the expansion of the Kerr-Mills program in order to sustain the interest for expansion which was demonstrated during the 1964 session.

Other bills which MAG followed closely included the abolition of the office of coroner and the creation of office of county medical examiner, technical amendments to the Georgia Professional Association Act, artificial insemination, interstate mental health compact and many others.

RECOMMENDATIONS

One of the most serious problems facing your State Legislation Subcommittee is the absence of sustained interest in legislative affairs. For the most part we run "hot and cold" with the result that it is difficult to ascertain the degree of participation in advance of any legislative fight. This lack of sustained interest manifests itself in its most damaging form in the failure of many physicians to establish and cultivate rapport with their Representatives and Senators. The obvious by-product of this situation is that when the "chips are down" the job of getting support for MAG positions on pending legislation becomes all the more difficult.

For this reason your Legislative Board recommends that all County Medical Societies, particularly those of 15 members or more, sponsor as an annual affair a special luncheon or dinner meeting at which the guests of honor would be members of the General Assembly (House and Senate). It would further recommend that when and where feasible that a representative from the MAG Headquarters office be invited to attend also. Your Board would not presume to suggest a standard format for such meetings, but would suggest that a small portion of the meeting be given to an articulate presentation of MAG legislative goals. Your Board would otherwise recommend that such meetings be social, get acquainted affairs.

Your Board recognizes that the problems of legislation, both State and national, are likely to be with us for some time to come. An awareness of this fact would indicate that future physicians may well profit from an exposure to the realities of legislative affairs the same as would those presently in practice.

Accordingly, it is recommended that a special legislative affairs program specifically designed for senior medical students, interns and residents be developed and presented this year. It is further recommended that the development and presentation of such a program be the responsibility of the Legislative Board on a cooperating basis with other Board and Subcommittees of MAG.

COMMENDATIONS

Many people have contributed toward the success of the MAG legislative program during the past year; so many in fact that it would be impossible to name them all. Special recognition, however, seems in order for the members of the Executive Committee of Council who gave so freely of their best efforts toward the solution of many of the legislative problems presented during the year. Also your Board would like to

pay tribute to Drs. John Acree, Hiawassee, Grady Coker, Canton and Sidney Johnson, Sr., Elberton, all of whom served with distinction in the Georgia General Assembly during the past two years.

In addition our thanks go to MAG Legal Counselors, Mr. Francis Shackleford and Mr. John Moore for their efforts in behalf of the legislative program of the Association.

We echo the praise for Jim Moffett that has so often been expressed by legislators themselves.

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted the report of the Legislative Board as recommended by the Reference Committee on motion duly made and seconded.

Special Activities

JOHN S. ATWATER, M.D., *Chairman*

The Board of Special Activities has continued to work in liaison with the State Board of Medical Education listing physicians and localities seeking placement. This is done through the M.A.G. Physicians' Placement Bureau.

The Subcommittee on Health Care of the Aging has continued its activities. Throughout the year the members have appeared before civic, social and professional groups on behalf of the Aging programs and the position of medicine in these activities. It has acted in cooperation with other M.A.G. committees and the Georgia Joint Council to Improve the Health Care of the Aged. There is now a full complement of four members of M.A.G. serving on the Joint Council. At the spring meeting, the Joint Council was reorganized and a stepped-up program of activities has been instituted including further study of the needs of the aged, further cooperation with the Georgia Commission on Aging, and a survey of the utilization needs of each of the respective participating organizations (MAG, Georgia Dental Association, Georgia Hospital Association and Georgia Association of Nursing Homes). Further study of the Home Care program is anticipated this year.

It is hoped that the continued efforts of this Subcommittee and Board will produce an even greater awareness of the problems facing the private practice of medicine. It is recommended that the Medical Association of Georgia continue its support of the work of this Board and Subcommittee.

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted the report of the Special Activities Board as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Second District Councilor No. A

COUNCILOR'S REPORT

W. FRANK MCKEMIE, M.D., *Councilor*

As Councilor of Second District, I wish to report attendance at all regular meetings of Council during the past year. The business of the Medical Association of Georgia was conducted in a thorough and an expeditious manner under the elected officers and Council of the Association during 1963-1964. The Medical Association of Georgia continues to exert active and effective leadership in medical affairs and health in Georgia, and to influence medical legislation intelligently.

Two medical seminars were given by medical societies in the Second District during the year and were well attended. Continued growth of membership in MAG in Second District is taking place.

REFERENCE COMMITTEE RECOMMENDATION — Approved.

HOUSE OF DELEGATES ACTION — Adopted the Supplementary Report No. A — Second District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of AMA Delegates No. B

DELEGATES' ACTIVITIES AT AMA MEETINGS

J. W. CHAMBERS, M.D., *Chairman*

Your Delegates, and ably assisted by your Alternate Delegates, continue to attempt to give you effective representation in the House of Delegates of the American Medical Association. We have attended the entire sessions of both the Atlantic City meeting in June, 1963, of the House of Delegates, and the interim meeting in Portland, Oregon, in December, 1963. Reports of both of these meetings were given immediately to your Council for their immediate information. Highlights of both of these meetings have been published in both the *Journal of the American Medical Association* and the *Journal of the Medical Association of Georgia,* and I trust that the membership of the Medical Association of Georgia has taken advantage of these reports published in these Journals to become better informed.

I am happy to report that by good organization the Medical Association of Georgia has been represented before every reference committee at both the annual session in Atlantic City and the interim session in Portland, Oregon. Your delegates are deeply indebted to members of the MAG who have gone to these meetings other than your elected representatives in helping us to have sufficient manpower to provide you with representation before these reference committees and then bring to the Delegates or the Alternate Delegates the reports on the discussions before these reference committees so that your Delegates can effectively represent you on the floor of the House of Delegates. The work of the House of Delegates of the American Medical Association continues to be complex and interesting, as noted by the published reports of the proceedings of the House of Delegates of the American Medical Association in Atlantic City. For an example, there is a booklet of one hundred and sixty-five pages, not including the indices. This will give you some idea of the mass of information which is considered by the House at its various meetings. The interim meeting does not require quite as much detail but many of the reports are given annually to the House of Delegates of the American Medical Association at the interim meeting in order to distribute the work load more evenly.

Two of the members of your delegation have served on reference committees—one at the annual session and one at the interim session. Two resolutions of the Georgia delegation, one resolution relative to "Operation Home Town" was introduced at the annual meeting in

Atlantic City and was passed favorably and one resolution on the opposition of physicians to inclusion under Social Security as directed by this House of Delegates was introduced in the interim session in Portland, Oregon,—it also was passed favorably.

Along with the routine reports and resolutions of the annual session in Atlantic City, two reports, I believe, deserve special comment to this House of Delegates. One is the report of the committee to study the operation of the joint commission on accreditation of hospitals which was reported at the June session in Atlantic City. This was an extremely thorough and exhaustive study and was accepted with some amendments as it was reported. Copies of this report are available to those who are interested by contacting the headquarters of the Medical Association of Georgia. The committee to study the scientific sections of the American Medical Association also submitted a complete and thorough discussion with some modifications by the House after the discussion. This is an extremely valuable report and will, without question, add considerably to the interest and information of the scientific meetings of the American Medical Association. Copies of this report may also be obtained by those desiring to read the report in its entirety.

Finally, Mr. Speaker, your delegates would again like to urge the membership of the Medical Association of Georgia through its House of Delegates to attend meetings of the American Medical Association and when they attend meetings to be sure and contact the headquarters of the Medical Association of Georgia at each meeting so that we might not only have better representation at the reference committees but that we might know and help these members get the most out of their attendance at the American Medical Association meetings. Your Delegates will appear before reference committee and will be happy to answer any questions directed to them rather than attempting to give a voluminous report at this time.

EUSTACE A. ALLEN, M.D., Atlanta
J. W. CHAMBERS, M.D., LaGrange, *Chairman*
HENRY H. TIFT, M.D., Macon

REFERENCE COMMITTEE RECOMMENDATION — Approved.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report of the AMA Delegates No. B — Delegates Activities at AMA Meetings, as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. G

ANNUAL SESSION MEETING SITES

ADDISON W. SIMPSON, JR., M.D., *Chairman*

The 1963 MAG House of Delegates approved a reference committee report which recommended that "Council investigate the feasibility and advisability of holding Annual Sessions at two alternating resort areas in the State of Georgia." Neither the reference committee nor the House of Delegates was explicit in naming the two areas in Georgia which would satisfy the definition of "resort areas." By general consensus, Council has construed "resort area" for the purpose of an MAG Annual Session to mean Atlanta and Jekyll Island.

In looking into this matter, the Council sought the views of the Chairman of the Annual Session Board whose responsibility is to plan, organize and stage our annual meetings.

The views of this Chairman were expressed in correspondence to the Speaker of the House. In brief his position with respect to this matter is that at the present time there are only two areas, Atlanta and Jekyll Island which have the facilities to house the complete MAG meeting (commercial and scientific exhibits, the House of Delegates, reference committee meeting space) "under one roof."

During its deliberations on this matter, Council was also exposed to the view that Annual Sessions should continue to be held in the five major population centers (Atlanta, Augusta, Columbus, Macon and Savannah) on a rotating basis. It was pointed out by advocates of this viewpoint that this tends to bring the physicians in the host city closer to MAG. It was also pointed out that to hold our Annual Session in only two locations would place a heavy burden on two local medical societies to act as host to the meeting every second year.

Because of the seriousness of these contrary points of view, Council voted to refer this matter back to the House of Delegates for action at the 1964 meeting.

The question to be resolved by the House is this: Should the Medical Asociation of Georgia, in an effort to seek better physical facilities for its Annual Sessions, abandon its "rotation system" until locations other than Atlanta and Jekyll Island construct more adequate convention facilities, or should MAG continue its present system of holding annual meetings in each of the large metropolitan centers around the state?

Council is not making a recommendation on this matter, but rather is placing it squarely before the highest authority in the Medical Association of Georgia with the request that definitive action be taken by the House of Delegates.

REFERENCE COMMITTEE RECOMMENDATION — It is the recommendation of this committee that due to the diverse opinions and lack of complete agreement on rotation of meetings, and due to the probability of improvement of facilities in the various cities, determination of sites be made by the appropriate site selection committee, such selection being based solely on their determination of the adequacy of facilities.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on Supplementary Report of Council No. G — Annual Session Meeting Sites, on motion duly made and seconded.

Resolution No. 1

CONSTITUTIONAL AMENDMENT TO ABOLISH OFFICE OF CORONER

REMER Y. CLARK, *Cobb County Medical Society*

WHEREAS, the recent Georgia Legislature at its regular 1964 session has passed measures abolishing the coroners' offices in Fulton and Cobb counties, subject to approval as constitutional amendments in the general election in November, 1964, and

WHEREAS, it is the considered opinion of the Cobb County Medical Society that a properly conducted medical system would better serve the public than the coroner's system,

NOW, THEREFORE, BE IT RESOLVED that the Cobb County Medical Society at its regular meeting April 7, 1964, unanimously adopted the following resolution:

"We request the House of Delegates of the Medical Association of Georgia to go on record as approving an amendment to the Constitution of the State of Georgia, which amendment would permit the governing body of any Georgia County, or group of adjoining counties, to abolish the office of coroner and replace that office with the office of medical examiner."

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted Resolution No. 1 — Constitutional Amendment to Abolish the Office of Coroner, as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. K

MAG AFFILIATE MEMBERSHIP BY-LAWS AMENDMENT

ADDISON SIMPSON, M.D., *Chairman*

The Council of the Medical Association of Georgia unanimously approved a change in the Bylaws of the Association to conform to changes in the Bylaws of AMA to provide for affiliate membership in MAG—and the Council recommends the adoption of this following amendment:

CHAPTER I

Section 2-B. Affiliate Members—Be it resolved that Chapter 1, Bylaws, Medical Association of Georgia, be amended to include a new Section to be inserted after Section 6.

Section 7, Affiliate Members—Persons in the following classes may become affiliate members;

a. American Physicians, located in foreign countries or possessions of the United States, and engaged in Medical Missionary and similar educational and philanthropic labors;

b. Dentists, who hold the degree of D.D.S., or D.M.D., who are members of their state and local dental societies;

c. Pharmacists who are active members of the Georgia Pharmaceutical Association;

d. Veterinarians who hold the degree of D.V.M., and are members of the Georgia Veterinary Association;

e. Teachers of Medicine, or of the sciences allied to medicine, and are not eligible to membership;

f. Scientists in sciences allied to Medicine and who are not eligible to membership;

All nominations must be made and approved by the Council of MAG not later than the session prior to the annual Convention. A majority vote of the House of Delegates shall elect to Affiliate Membership.

Affiliate members shall not be required to pay membership dues, and shall enjoy the privileges of the scientific meetings without the right to vote and hold office, and shall not be entitled to receive any publication, except by subscription.

The present Sections 7, 8, 9, 10, and 11 are to be renumbered to conform to the above.

REFERENCE COMMITTEE RECOMMENDATION — Aproved as amended, the ninth paragraph reading:

"All nominations must be made by component county medical societies and approved by the Council of MAG not later than the meeting prior to the Annual Session. A majority vote of the House of Delegates shall elect to affiliate membership."

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report of Council No. K — MAG Affiliate Membership ByLaw Amendment, as amended in the ninth paragraph by the Reference Committee recommendation on motion duly made and seconded.

Supplementary Report of Council No. L

COUNTY MEDICAL SOCIETY MEMBERSHIP REQUEST

ADDISON SIMPSON, M.D., *Chairman*

The Council of the Medical Association of Georgia meeting May 2, 1964, unanimously approved the following Resolution on County Society Membership and recommended that the MAG House of Delegates also approve this Resolution:

WHEREAS, the Medical Association of Georgia is concerned with elevation of the standards of medical practice in Georgia, and

WHEREAS, many of the component county medical societies of this Association have already voluntarily admitted qualified Negro physicians to their membership, and

WHEREAS, membership in a county medical society is a contributing factor in elevating the quality of the practice of medicine in any community.

THEREFORE BE IT RESOLVED, that the House of Delegates of this Association requests that all component county medical societies voluntarily admit qualified Negro physicians to their membership.

REFERENCE COMMITTEE RECOMMENDATION — Approved.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report of the Council No. L — County Medical Society Membership Request, as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. M

REDISTRICTING OF COUNCILOR DISTRICTS

ADDISON SIMPSON, M.D., *Chairman*

The Council of the Medical Association of Georgia meeting May 2, 1964, received a recommendation from its Executive Committee of Council that a study committee be appointed by Council to study the matter of redistricting of Councilor Districts and that the study committee report their recommendations back to Council for consideration.

After Council discussion of the recommendation, it was voted that a Supplemental Report by Council be submitted to the House of Delegates recommending to the House that such a study committee be appointed by Council and that because of the urgency of this matter, that the Council be empowered to act for the House of Delegates on the matter of redistricting of the MAG District Societies after Council has received the study committee report.

REFERENCE COMMITTEE RECOMMENDATION — Approved with the following amendment in the second paragraph:

"After Council discussion of the recommendation, it was voted that a Supplemental Report by Council be submitted to the House of Delegates recommending to the House that such a study committee be appointed by Council and that because of the urgency of this matter, that the Council *report to the House of Delegates at the regular or a call meeting* on the matter of redistricting of the MAG District Societies after Council has received the study committee report."

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report M. of Council — Redistricting of Councilor Districts, as amended by the Reference Committee recommendation on motion duly made and seconded.

Resolution No. 5

DIVISION OF COUNTY SOCIETIES BY REDISTRICTING

J. H. ROBINSON, M.D., *Sumter County Medical Society*

WHEREAS, a number of local societies will be divided by new district lines and

WHEREAS, the Third District Medical Society has requested that these societies remain intact.

NOW, THEREFORE, BE IT RESOLVED, that such societies be given the option of retaining their organization and deciding with which district they shall be affiliated.

REFERENCE COMMITTEE RECOMMENDATION — The committee recommends that this Resolution be referred to the study committee of the Council on redistricting as stipulated in Supplementary Report M — Redistricting of Councilor Districts.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on Resolution No. 5 — Division of County Societies by Redistricting, on motion duly made and seconded.

Supplementary Report of Council No. N

TAX EQUALITY

ADDISON SIMPSON, M.D., *Chairman*

The Council of the Medical Association of Georgia meeting, May 2, 1964, hereby unanimously approved and recommended to the Medical Association of Georgia House of Delegates the following Resolution on "Tax Equality" for adoption by the House:

WHEREAS self-employed individuals, including professional people operating in partnership form, have been inequitably treated for many years under the Federal tax law with respect to the matter of providing for their retirement, and

WHEREAS the Self-Employed Individuals Tax Retirement Act of 1962 has proved to be ineffective to eliminate the discrimination against the self-employed, and

WHEREAS the Internal Revenue Service is presently considering the promulgation of an amendment to the so-called "Kintner Regulations" which would seriously discriminate against professional people who have adopted the form of a professional corporation or professional association.

NOW THEREFORE be it resolved that the Medical Association of Georgia adopt the following Resolutions:

1. To urge the adoption by the Congress of *H. R. 9217* (Weltner Bill) and *S. 2403* (Talmadge Bill), which would amend Section 7701 of the Internal Revenue Code of 1954 to clarify the tax status of certain professional associations and corporations formed under state law.
2. To urge a return by the Internal Revenue Service to the earlier regulations based upon principles laid down years ago by the United State Supreme Court.
3. To urge the Georgia delegation in Congress actively to support the enactment of legislation to accomplish the above purposes and objectives.

REFERENCE COMMITTEE RECOMMENDATION — Approved with commendation.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report of Council No. N — Tax Equality, as recommended by the Reference Committee on motion duly made and seconded.

It was moved by Reference Committee No. 2 Chairman William R. Birdsong, Macon, and duly seconded that the report of the Reference Committee be approved as a whole and it was so ordered.

Report of Reference Committee No. 3

T. A. Sappington, Thomaston, Chairman

(*The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendations for action pursuant to it taken by the House of Delegates.*)

Reference Committee No. 3 met in the Main Meeting Room of the Macon Auditorium, Macon, Georgia, at 2:30 P.M. on May 4, 1964. Members present were: T. A. Sappington, Thomaston, Chairman; F. A. Sams, Fayetteville, Secretary; John E. Pollock, Jr., Washington; Roy T. Farrow, Dalton; L. C. Durrence, Jr., Blackshear; E. L. Harrell, Jesup; Harrison Rogers, Atlanta; and Charles R. Smith, Columbus. Vice Chairman T. D. Sappington, Thomaston, served as Chairman in the absence of Dr. A. J. Waters, Augusta.

Third District Councilor

FRANK A. WILSON, M.D., *Leslie*

The Third District has seven organized Societies. The Randolph-Terrell Society had a re-organizational meeting in September which I attended. The activity of the other Societies is on a level with the past year.

The District Society had its fall meeting in Americus. Our spring meeting is planned for Columbus.

As Councilor for the Third District I have attended all of the regular meetings of the Council.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Ben Hill-Irwin				
J. E. Smith				
Fitzgerald	10	9	9	8
Flint				
W. Kelvin Lane				
Ashburn	14	13	15	14
Peach Belt				
Robert A. Carter				
Warner Robins . .	32	28	29	25
Ocmulgee				
Ray L. Johnson				
Eastman	16	11	15	11
Randolph-Terrell				
Carl E. Sills				
Cuthbert	13	11	12	10
Sumter				
H. L. Simpson				
Americus	21	16	22	18

Taylor				
E. C. Whatley				
Reynolds	3	2	4	2
	109	90	106	88

Frank A. Wilson
Councilor
Leslie

REFERENCE COMMITTEE RECOMMENDATION — The committee approves with commendation the report from the Third District Councilor, Dr. Frank Wilson, Leslie.

HOUSE OF DELEGATES ACTION — Adopted the report of the Third District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Fourth District Councilor

VIRGIL B. WILLIAMS, M.D., *Griffin*

The Councilor of the Fourth District has attended all regular and called meetings of the Council during the past year.

Formal and informal consultations have been held with members of the Association residing in the Fourth District. During the year the Councilor has remained in contact with activities of all societies in his district. Problems concerning organization and ethics assigned by Council are near completion.

The Councilor has been ready at all times to advise on problems pertaining to the office.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Clayton-Fayette				
Wells Riley				
Jonesboro	5	5	4	4
Coweta				
Charles B. Thomas				
Newnan	22	16	16	13
Lamar				
S. B. Traylor				
Barnesville	3	3	3	3
Meriwether-Harris				
H. Calvin Jackson				
Manchester	14	8	14	9
Newton-Rockdale				
G. G. Tuck				
Covington	11	8	11	8
Spalding				
Thomas L. Lipscomb				
Griffin	44	36	40	35
Troup				
Joseph F. Krafka				
LaGrange	41	34	39	33
Upson				
L. L. Allen				
Thomaston	15	12	15	12
	155	122	142	117

Virgil B. Williams
Councilor
Griffin

REFERENCE COMMITTEE RECOMMENDATION — The committee approves with commendation the report of the Fourth District Councilor, Dr. Virgil Williams, of Griffin. Notice was taken by the committee of the number of doctors in both the Third District and the Fourth District who belong to the Medical Association of Georgia but do not belong to the American Medical Association. Recommendation is made to the Executive Committee of Council that a study be made to ascertain the reasons for this disparity.

HOUSE OF DELEGATES ACTION — Adopted the report of the Fourth District Councilor as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Woman's Auxiliary Advisory

RALPH W. FOWLER, SR., M.D., *Chairman*

The Advisory Committee from the Medical Association of Georgia attended the regular summer meeting of the Executive Board of the Woman's Auxiliary at Hotel Oglethorpe, Savannah, Georgia, July 16 and 17, 1963.

At this meeting, the theme for the year was announced by Mrs. John E. Porter, President, as 'Serve and Communicate."

After hearing the comprehensive and ambitious programs for the coming year proposed by the officers and committee chairmen, our Committee could only give our unqualified and enthusiastic approval. At this time, we offered our services for consultation and help throughout the year.

At the midwinter meeting of the Executive Board of the Auxiliary held in Macon, January 23, 1964, Dr. George R. Dillinger, President of the Medical Association of Georgia, addressed the body stressing the various legislative problems facing the medical profession today.

At the request of the Woman's Auxiliary, the Executive Committee of Council has requested our committee to study the structure, needs, and requirements of the Woman's Auxiliary for the future. It is our hope that this investigation can be concluded and recommendations be made at our annual convention in Macon.

We wish to express our appreciation to the Woman's Auxiliary for their continued comprehensive and energetic activities in behalf of our association.

REFERENCE COMMITTEE RECOMMENDATION — The committee approved the report with the additional recommendation that the Executive Committee of Council of the Medical Association of Georgia implement in any way possible the activities of the Auxiliary.

HOUSE OF DELEGATES ACTION — Adopted the report of the Woman's Auxiliary Advisory Committee as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Annual Session

PETER HYDRICK, M.D., *Chairman*

The Chairman of Annual Session met in Macon with Mr. Krueger, Dr. Huie, Chairman of Exhibits and representatives of Sheppard Decorating Company. A floor plan was laid out and this year due to the physical arrangement of the facilities presented for the Annual Session a new floor plan will be tried. This is a free-flow arrangement for traffic, elimination of the maze. This will probably better satisfy the physicians and we hope it will satisfy the exhibitors. This type of plan is becoming more popular at other medical meetings throughout the country.

The committee also established meeting rooms for the scientific portions of the program. Since the convention hotel does not have adequate facilities to house exhibits, furnish meeting rooms and house the physicians in attendance, it was necessary to place the exhibits in the City Auditorium along with the main meeting room and one additional meeting room. Other meeting rooms will necessarily be away from the Auditorium because of their lack of space but it is hoped that these are within convenient walking distance from the hotel and the Auditorium.

The Georgia Academy of General Practice has adopted a policy to discontinue exhibits at their meetings and for those companies which could attend the MAG meeting only every third year (attending the MAG, AGMA and GAGP once every third year) will now be able to attend at least on alternate years. This should show an increase in the number of exhibits at our Annual Session.

The Chairman of Annual Session was unable to return to Macon to meet with the representatives of the Woman's Auxiliary but he did send his alternate. This apparently was a successful meeting and has provided the Auxiliary with the things they required for a successful meeting.

The MAG always has had a cocktail party for the exhibitors, held on Sunday afternoon immediately following the meeting of the House of Delegates and hosted by the House of Delegates. However, due to changes in the program requested by the President, the House of Delegates now meets on Monday afternoon, and is followed by alumni parties and suppers. This would be conflicting and since there is no other time when the House of Delegates meets which could be appropriately followed by a cocktail party for the exhibitors, it was decided to delete this function from the program this year.

REFERENCE COMMITTEE RECOMMENDATION — This report is approved by the committee with commendation for work well done in arranging the meeting with the recommendation that the custom of the Medical Association of Georgia giving a party for the exhibitors be reinstated if possible.

HOUSE OF DELEGATES ACTION — Adopted the report of the Annual Session Board as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Crippled Children Subcommittee

E. B. Dunlap, Jr., M.D., *Chairman*

No specific activities have occurred throughout the year 1963-64 and therefore no report is indicated.

REFERENCE COMMITTEE RECOMMENDATION — This report is noted and the statement that no specific activities have occurred in 1963-64 is questioned by the committee.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Crippled Children Subcommittee on motion duly made and seconded.

Disaster Medical Care Subcommittee

Virgil B. Williams, M.D., *Chairman*

The Subcommittee on Disaster Medical Care met with the Chairman of the Board of Governmental Medicine and submitted proposed plans for the coming year.

All county societies have been requested to furnish a copy of disaster plans which are now in effect. Response to this request was only minimal.

In the near future the committee plans to meet with the American Medical Association Committee on Disaster Medical Care at Headquarters Building in Atlanta.

The chairman of this committee has worked closely with Civil Defense in the preparation of a demonstration unit of a Civil Defense Emergency Hospital in Atlanta. This demonstration unit is now on display at the Farmers Market in Atlanta.

The chairman of this committee has been ready at all times to assist in planning Disaster Medical Care Programs. Information concerning Disaster Medical Care programs has been distributed to county societies requesting such.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report with commendation for Dr. Virgil Williams' activities.

HOUSE OF DELEGATES ACTION — Adopted the report of the Disaster Medical Care Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Maternal and Infant Welfare Subcommittee

Eugene L. Griffin, M.D., *Chairman*

Maternal Section

Under the Chairmanship of Doctor Eugene Griffin this Subcommittee met quarterly (March 23, June 16, September 22 and December 15, 1963) to review the cases of maternal mortality occurring in the State of Georgia and those residents of the State who expired outside the State in association with childbirth. The maternal mortality committee studies every case of maternal mortality occurring in Georgia and sends a critique of the handling of the case to the physician in attendance at the time of death. The response to questionnaires is better; however, improvement is needed in giving at least the gross findings at autopsy when done and in giving additional pertinent information in the remarks section since no one questionnaire can be formulated to cover all cases well. The physician and patient identity is kept anonymous to the members of the subcommittee. The subcommittee also took under consideration for necessary action other factors related to maternal and infant health and welfare during this period.

Sixty-six (66) deaths that revealed any indication of being associated with a pregnancy were reviewed. (Note Georgia Statistics 1962). Forty-eight (48) of these were classifiable as deaths attributable to pregnancy either directly or indirectly. The leading cause of death was hemorrhage (16). Five of these were associated with uterine rupture and 3 with ectopic pregancy. Second was infection (12) most of which were associated with abortion. The number attributable to criminal abortion could not be determined due to lack of positive evidence. The third leading cause was toxemia (11) closely followed by emboli (9). It is gratifying to note that the maternal deaths due to the toxemias continues to decrease both in number and in percentage. It is hoped this is due to improved prenatal care.

There were 99,047 live births in Georgia in 1962 giving a maternal death rate of 4.8 per 10,000. The

maternal mortality has steadily decreased over the past four years from 8.9 in 1959 to 4.8 in 1962, down over 50% from the 1959 rate. This improvement has been steady and substantial each year. The estimated rate for the nation as a whole in 1962 was 3.2 per 10,000 live births.

There were 8,677 live births without medical attendant for a percentage of 8.8 of the total. This is of much concern to the committee even though it is an improvement over 1961 both in numbers, 9,177, and in percentage, 9.4. Another matter of concern is the premature rate. It has increased persistently and substantially over the years; for example, in 1947 the rate in Georgia was 60.8 per 1,000 live births and in 1962 it was 93.1. This increase was reflected each year without exception. It is gratifying that in 1963 five additional counties worked out a plan for delivery by a physician in a hospital of the low income, high risk group of obstetrical patients. This was accomplished through diligent effort and close cooperation of the local physicians, hospitals and health departments of the communities. It is hoped that plans of this type will be considered by all local medical societies in Georgia. Those plans that have been successful are those in which the local physicians have taken the initiative and leadership. Talmadge Memorial Hospital continues to accept complicated obstetrical patients from any part of the State on prior notification and referral by a physician.

The live births to unwed mothers continues high in Georgia. The rate in 1962 was 98.4 per 1,000 live births as compared to the U. S. rate in 1960 of 56.9 per 1,000 live births. It is interesting to note that over half were the second or subsequent live birth.

During the year the committee followed closely, legislation (H.R. 3386) pertaining to improvement of maternal child health. It requested and received the support of the Medical Association of Georgia in recommending passage of the legislation. This legislation was recently passed by Congress and is now Public Law 88-156. Both medical schools and the health departments in Georgia have initiated plans to improve maternal and infant care with support of this legislation.

Mr. Eugene Oberdorfer, Chairman of the Georgia Junior Chamber of Commerce, Subcommittee on Mental Retardation, appeared before the committee requesting advice and guidance reference the use of surplus food commodities in improvement of maternal nutrition. The committee concurred in this approach and actively participated with the Junior Chamber of Commerce, State Department of Health, Family and Children's Services, Department of Agriculture and Department of Education with the result that the criteria for eligibility was changed to recognize the nutritional needs of the obstetrical patient and a concerted effort is being made to make these commodities available to the needy in other counties throughout the State. The U. S. Department of Agriculture is considering lowering the salt content of these foods.

After review by State and local medical societies the committee again reviewed the proposed sterilization law. After agreement that it was in the best form possible from the medical standpoint it was referred to the legal advisor to be put in legal form. Since this is a controversial subject, any report or recommendation shall be first brought before the council of the Medical Association of Georgia with a recommendation that before the introduction of such a sterilization law into the legislature, that the proposed bill be brought up for action before the House of Delegates of the Medical Association of Georgia.

Perinatal Mortality Section

This subcommittee met on February 3, 1963, and reviewed its study of fetal and neonatal deaths of infants weighing between 2 pounds, 1 ounce and 5 pounds, 8 ounces (1,000-2,500 grams). The results of this study have been published.

This committee further considered its future activities and decided that it had completed its mission reference the above noted study. Further, it would not be feasible to function as a committee to review all perinatal deaths due to the volume, and lack of records available for its study. Thus, it was recommended that the perinatal mortality phase of the activities of the committee on maternal and infant welfare be suspended to be reactivated on a special study basis.

It is hoped that as local perinatal mortality and morbidity committees evolve that this committee could work in cooperation with them more effectively.

LIVE BIRTHS WITHOUT MEDICAL ATTENDANT

	Total	*White*	*Nonwhite*
Number	8,677	170	8,507
Per Cent	8.8	0.3	24.1

CAUSES OF OBSTETRICAL DEATHS

	Total	*White*	*Nonwhite*
Hemorrhage (Ruptured uterus 5, Ectopic pregnancy 3)	16	7	9
Infection	12	4	8
Toxemia	11	5	6
Emboli	9	3	6

CAUSES OF INFANT DEATHS

	Number			*Rates or Ratio*		
	Total	*White*	*Nonwhite*	*Total*	*White*	*Nonwhite*
Immaturity (774-776)	462	230	232	4.7	3.6	6.6
Postnatal asphyxia and atelectasis (762)	431	267	164	4.4	4.2	4.6
Other and ill-defined diseases peculiar to early infancy (765-773)	427	218	209	4.3	3.4	5.9
Influenza and pneumonia (480-483, 490-493)	393	95	298	4.0	1.5	8.4
Congenital malformations (750-759)	324	239	85	3.3	3.7	2.4
Birth injuries (760-761)	184	114	70	1.9	1.8	2.0

Pneumonia of newborn (763)	136	53	83	1.4	0.8	2.4
Accidents, other than motor-vehicle (E800-E802, E840-E962)	114	42	72	1.2	0.7	2.0
Gastritis, duodenitis, enteritis and colitis (543, 571-572)	106	15	91	1.1	0.2	2.6
Other diseases of respiratory system (470-475, 500-527)	93	27	66	0.9	0.4	1.9
Residual (all other)	316	118	198	3.2	1.9	5.6

Above rates are on the basis of one per 1,000 live births.

GEORGIA
1962 Statistics

	Number			Rates or Ratio			
	Total	*White*	*Nonwhite*	*Total*	*White*	*Nonwhite*	
Population	4,097,500	2,945,300	1,152,200	Not applicable			
Live Births	99,047	63,778	35,269	24.2	21.7	30.6	Per 1,000
Premature Births	9,221	4,547	4,674	93.1	71.3	132.5	Per 1,000
Premature Infant Deaths	462	230	232	4.7	3.6	6.6	Per 1,000
Fetal Deaths	3,300	2,034	1,266	33.3	31.9	35.9	Per 1,000
Neonatal Deaths	1,927	1,058	869	19.5	16.6	24.6	Per 1,000
Perinatal Deaths	3,709	1,960	1,749	37.4	30.7	49.6	Per 1,000
Infant Deaths	2,986	1,418	1,568	30.1	22.2	44.5	Per 1,000
Obstetrical Deaths	48	19	29	4.8	3.0	8.2	Per 10,000
Maternal Deaths (90 days of pregnancy, all causes)	66	27	39	6.7	4.2	11.1	Per 10,000

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves this report with commendation for the tremendous amount of work and interest on the part of the committee in the past year. The additional recommendation is made that a draft of a sterilization law be submitted as soon as possible to the Executive Committee of Council of the Medical Association of Georgia for their approval without submisssion of this Bill to the House of Delegates. PERINATAL SECTION — This committee is also commended for its report on perinatal mortality with the recommendation that this phase of the committee activity be reactivated whenever it is deemed necessary.

HOUSE OF DELEGATES ACTION — Adopted the report of the Maternal and Infant Welfare Subcommittee as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Supplementary Report of Muscogee County Councilor No. E

COUNCILOR'S REPORT

LUTHER H. WOLFF, M.D., *Councilor*

During the fall of 1963 Dr. Willis P. Jordan resigned as Councilor from the Muscogee County Medical Society and the present Councilor assumed these duties.

The Muscogee County Medical Society has been quite active during the past year in various community and medical affairs. Meetings are held regularly at monthly intervals except for the three summer months. At most of these meetings a visiting scientific speaker is presented and business meetings are held regularly at every meeting.

The Society issues a Monthly Medical bulletin which is distributed over a wide area. Currently, the Muscogee County Medical Society is supervising and providing the Sabin vaccine served jointly with the Junior Chamber of Commerce to all citizens of the county who desire to take it.

The Councilor has attended all of the meetings of the Muscogee Medical Society and reports regularly on activities of the Council, especially the legislative and political activities.

The County Society Officers met with the entire Muscogee County representation to the General Assembly prior to the last session of the Assembly and discussed at length the reasons why we favored certain legislative matters. It is believed that this meeting resulted in the very favorable action by our legislators.

The Councilor has attended all meetings of the Council and has cooperated with the officers of the Medical Association of Georgia in every way possible during the past year.

It is considered a pleasure and a privilege to represent the Muscogee County Medical Society, and the associations and friendships formed while working with the Officers and Councilors of the Medical Association of Georgia are much esteemed.

REFERENCE COMMITTEE RECOMMENDATION — This report was approved with commendation and it is noted with approval that the society had meetings with its Legislators prior to the convening of the General Assembly. More local societies are urged to follow this plan.

HOUSE OF DELEGATES ACTION — Adopted the Supplementary Report No. E — Muscogee County Medical Society Councilor, as recommended by the Reference Committee with the additional recommendation by the Reference Committee on motion duly made and seconded.

Supplementary Report of Governmental Medical Services Board No. D

REPORT OF BOARD ACTIVITIES

LUTHER H. WOLFF, M.D., *Chairman*

A called meeting of the Medical Association of

Georgia Board of Governmental Medical Services was held on November 3, 1963, at the Medical Association of Georgia Headquarters in Atlanta. Present were Dr. Virgil B. Williams, Chairman of the Committee on Disaster Medical Care; Dr. Eugene L. Griffin, Chairman of the Committee on Maternal and Infant Welfare; Dr. Ernest B. Dunlap, Chairman of the Committee on Crippled Children; Dr. John Bowen, Chairman of the School Child Health Committee; and Dr. Luther H. Wolff, Chairman.

The meeting was called to order and it was explained that the purpose of the meeting was essentially two-fold:

1. To discuss plans and projects of each committee for the ensuing year.

2. To develop liaison and co-operation between the various committees so that various projects might be undertaken as joint ventures, and that duplication of efforts might be minimized.

Splendid reports were received from the Chairman of each Sub-Committee and excellent discussions were held regarding current and future projects of various sub-committees.

Discussion Regarding Payments to Physicians

In addition to committee reports, a general discussion regarding the various methods of payment for services rendered to the indigent under the various state programs was held. Payments fluctuate from fee-for service arrangements. (i.e., Vocational Rehabilitation), through part time salary, (i.e., crippled children), through no payment (i.e., cancer clinic patients), and various combinations thereof. It was felt that an attempt should be made to bring some sort of order and consistency out of this maze of inconsistency.

Council took cognizance of this problem, and at the Council Meeting of the 15th of December, 1963, authorized the Executive Committee to appoint a study committee for this purpose. The Executive Committee of the Council thereupon appointed the Board of Governmental Medicine to attack this problem. Accordingly, a called meeting of the Board of Governmental Medicine was held at the Medical Association of Georgia Headquarters Building on Sunday, February 23. Board members present were: Luther Wolff, Chairman; A. E. Hauck, Atlanta; Virgil Williams, Griffin; John Bowen, Sandy Springs; and Eugene L. Griffin, Atlanta. Also present were Drs. John T. Mauldin, MAG Secretary, Atlanta, and John Venable, Director, State Department of Public Health, Atlanta. Mr. James M. Moffett was also present as MAG Staff.

Dr. Venable was able to give background information on the many and varied activities of the State Board of Health as related to the practice of medicine. He presented a documented survey of the private practice physicians participating in Public Health programs for the fiscal years 1962-1963. This survey listed the various programs, the number of physicians participating, the number of physicians paid, the lowest and highest amounts paid for physician, the total amount paid, how such payments are made and the rate at which payment is computed.

Dr. Venable pointed out that the Department would like for MAG to make recommendations on the payment plans of the Public Health Department for each of the programs under study. He added that if this was not feasible he would hope for a general, over-all recommendation that could be applied to all the programs.

General discussion of all the complexities of the problems involved was held with no definite workable solution being evolved. The Chairman then asked that each member of the Board review the material which had been presented and the ideas expressed by those present with the view in mind of holding another meeting in approximately one month. He also asked that each member exchange these views by letter prior to the next meeting. By general agreement this request was adopted.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves this report with commendation and additional recommendations that the Governmental Medical Services Board work closely and diligently with various agencies involved to arrive at some satisfactory schedule of remuneration.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report D — Governmental Medical Services Board, as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Supplementary Report of Woman's Auxiliary to the Medical Association of Georgia No. F

1963-64 ACTIVITIES OF WOMAN'S AUXILIARY TO MAG

MRS. JOHN E. PORTER, *President*

Woman's Auxiliary to the Medical Association of Georgia

TO MEMBERS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA.

Thank you for the opportunity as the representative of your auxiliary to speak with you. Year after year you have heard the tremendous record of activity in reports of the preceding presidents. The recorded evidence in the Annual Report 1963-64 of the Woman's Auxiliary to the Medical Association of Georgia statistically reiterates and amplifies previous endeavors.

In 1963, we launched our SAC Program for Progress toward this Thirty-Ninth Convention of the Woman's Auxiliary with the theme SERVE AND COMMUNICATE. The aim of this program was to prepare our members to speak for medicine with knowledge and conviction, and to communicate with service which will prove medicine's concern for the welfare of the community. To conserve effort, committees have been encouraged to plan together for projects which will meet community needs. And we are emphasizing to our members that possibly their most important Auxiliary contributions come through their work in the schools, churches, and community organizations. However, it is possible to utilize the knowledge and objectives of the auxiliary as a fulcrum for exerting influence among our community leaders; concentrate and consolidate as well as stimulate with ideas and service.

Today's thinking women seek to eliminate the ineffectual effort that results in motion without progress. Due to the constant bid for her time, she is forced to scrutinize and evaluate the activities in which she participates. During the visits to county auxiliaries, small discussion groups were consulted regarding their opinions of operations and organization of auxiliary. At Mid-Winter Board meeting it was voted to appoint a committee to discuss and evaluate the feasibility and possibility of employing a secretary.

The group of five past presidents and current officers met in Atlanta, February, 1964. The aims and ob-

jectives of auxiliary were reviewed. Originally, the prime purpose was to promote friendship among the wives of doctors and do such programs as sanctioned by the doctors. It was agreed that some further reviewing was necessary and should be conducted by a committee to study the By-Laws and Constitution and if possible submit revisions. The following summary may contribute some light on the subject.

The past years have sounded a constant alert for the doctor and his wife to develop political acumen. Established guidelines of action should be sustained. Another stabilizing positive approach to the medical needs of the future is the American Medical Education and Research Foundation. Rather than allow government subsidy for our medical schools and government loans to our medical students, we must contribute to the AMA-ERF programs. One dollar to the student loan fund provides 12 dollars and fifty cents loan money to a student and ultimately insures our stake in private enterprise.

These two areas of activity require almost organization within themselves. Paramedical Recruitment, with its ever widening circles of responsibilities, has an increased scope of organization within organization dimensions. A new and fast growing committee, the International Health Activities, has appeal and is easily within the realm of practical function. Here, it is anticipated that a new seaport embarkation point will be needed, most likely in Georgia. Adequate and effective representation among other organizations on the state, regional and national levels means an increase of travel time for the president. This is a must since these meetings provide the contact and communications so necessary to this two way street we should travel.

Our state publication, *The Pulse Line* of WAMAG, has contributed greatly to informing and stimulating interest among members. However, we need more members, not only for the additional revenue but to develop the cohesive esprit de corps so essential to our existence. It has been suggested that there might be an increase in dues to include a subscription to the National Bulletin of the Woman's Auxiliary to the American Medical Association, another source of shared knowledge. Possibly, information of auxiliary work could be channeled to the doctors. They might then advise membership participation for their wives. We are approximately twelve hundred short of our membership potential.

Actually, from the fantastic accomplishments of the past and in the light of this examination, it seems inevitable that our activity will continue to broaden. We are aware that the respect we command is a reflection of the profession and the Medical Association of Georgia. We would like to do the work worthy of that reflection. Our areas of actual cooperative work with you are increasing. It is hoped it will continue to increase. Our greatest potential can be reached when we earn mutual respect one for the other.

This is worthwhile work and we have a group of capable women who are devoted to the Woman's Auxiliary to the Medical Association of Georgia. The stature of auxiliary has been gained and maintained with the help of MAG and through them, the assistance of the staff at MAG headquarters. For these supportive measures, we are grateful. A letter from your president to the chairman of our advisory committee assures us consideration for our needs.

It may seem that I have dwelled on our problems rather than singing the glory song of accomplishments. This is not so. The next few days will not give us enough time to share with each other the challenges met and conquered, nor the words written and spoken indicate the true measure of acknowledgment due for the cooperation and hospitality extended this president.

As individuals you know the personal interest your wives have in Mental Health, Rural Health, Safety, Programs for the Handicapped, Senior Citizens, etc., etc., ad infinitum.

Do not let her kid you when she says, "I'm going 'round in circles!" Beware! She will turn those circles into wheels. And—"Blessed are the wheels, because they are what makes the world go 'round."

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee notes this report with approval and commendation of Mrs. Porter for her report and address before the House of Delegates. The untiring efforts and good will of these ladies are most deeply appreciated by every member of the Medical Association of Georgia.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report of the Woman's Auxiliary to the Medical Association of Georgia No. F — 1963-64 Activities of the Woman's Auxiliary, as recommended by the Reference Committee on motion duly made and seconded.

Professional Conduct Committee

W. Bruce Schaefer, *Chairman*

(No Report Received)

REFERENCE COMMITTEE RECOMMENDATION — The absence of reports from this committee leads one to the assumption that there were no complaints brought before this committee during the year, but a written report to substantiate this assumption is rigorously requested in the future.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the report of the Professional Conduct Committee on motion duly made and seconded.

Public Health Subcommittee

R. W. Edenfield, M.D., *Chairman*

(No Report Received)

Rehabilitation Subcommittee

F. James Funk, M.D., *Chairman*

(No Report Received)

School Child Health Subcommittee

John Bowen, M.D., *Chairman*

(No Report Received)

Veterans Affairs Subcommittee

W. Bruce Schaefer, M.D., *Chairman*

(No Report Received)

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee notes that no report was received from the Public Health Sub-Committee, the Rehabilitation Sub-Committee, the School Child Health Sub-Committee, and the Veterans Affairs Sub-Committee. It is unbelievable that no activities occurred in these committees during the past year. It is also noted that fairly large sums of money have been appropriated to some of these committees and have been spent by them. It is consequently felt that the House of Delegates is entitled to a report from any committee that is entitled to be a committee, and especially so from one that spends money that belongs to the Medical Association of Georgia.

HOUSE OF DELEGATES ACTION — Adopted the Reference Committee recommendation on the reports of the Public Health Sub-Committee, Rehabilitation Sub-Committee, School Child Health Sub-Committee, and the Veterans Affairs Sub-Committee, on motion duly made and seconded.

As Chairman of Reference Committee No. 3, I would like to thank each member for his participation in the deliberations and decisions of the committee. I would also like to thank the ones who appeared before this committee. I, also, want to express my appreciation to the excellent assistance afforded the committee by the Medical Association of Georgia Headquarters Staff.

It was moved by Reference Committee No. 3 Chairman T. A. Sappington and duly seconded that the report of the Reference Committee be approved as a whole and it was so ordered.

Report of Reference Committee No. 4
Fred Coleman, Dublin, Chairman

(*The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendations for action pursuant to it taken by the House of Delegates.*)

Reference Committee No. 4 met in the Macon Auditorium Main Meeting Room, Macon, Georgia, at 2:30 P.M. on May 4, 1964. Members present were: Fred Coleman, Dublin, Chairman; J. Frank Harris, Atlanta, Vice Chairman; Braswell E. Collins, Macon, Secretary; John B. Crawford, Barnesville; J. M. Grisamore, LaGrange; W. H. Fulmer, Savannah; John E. Hendley, Millen; A. J. Green, Augusta; and M. F. Simmons, Decatur.

Fifth District Councilor

FLOYD R. SANDERS, M.D., *Decatur*

As noted in previous years, the Fifth District Medical Society has had another year of medical prosperity. All societies in the district have continued to add new members, and many of the "older" members have reached new heights in respective medical fields both locally and nationally.

Fulton County's activities will be covered by its own Councilor and Vice Councilor.

The DeKalb County Medical Society has continued to function in a creditable and civic minded fashion as it daily meets the medical needs of the community. The DeKalb General Hospital continues to be a center of major medical activity in the county, and to a great measure has partially relieved the strain on Emory University Hospital and Egleston Hospital For Children, which have served this area so well for so many years.

The annual district meeting was held in November, 1963 with Dr. Paul McCleave as guest speaker. The meeting was well attended by physicians and ministers of all faiths, who heard a most inspiring message from Dr. McCleave. New district society officers were elected as follows: — President, Dr. Robert I. Gibbs (DeKalb County); Vice President, Dr. Carl C. Jones, Jr. (Fulton County); Secretary-Treasurer, Dr. Paul Teplis (Fulton County).

Your Vice Councilor, Dr. L. P. Matthews, continues to support the Councilor in the duties of representing the district.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
DeKalb				
M. Hobson Rice				
Decatur	139	120	126	108

Floyd R. Sanders
Councilor
Decatur

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Fifth District Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Fifth District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Fulton County Councilor

CHARLES S. JONES, M.D., *Atlanta*

During the past year, and continuing to the present, the opposition of organized medicine to the King-Anderson bill is active. There has been one significant change which promises more effective organization in the future. Dr. Harrison Rogers has been appointed as Chairman of a Legislative Committee from Fulton County Medical Society. Among several efforts which will be made by his committee will be one encouraging doctors and laymen to write to their representatives in Washington expressing their sincere opposition to King-Anderson.

A matter of some concern to all of us in the recent session of the Legislature in Georgia, was the re-constitution of the State Board of Health. Many doctors over the State were familiar with this matter. However, for those who were not familiar it is significant to point out that a very strenuous effort was made to completely re-constitute the State Board of Health, and to put the majority of the members on the board on the basis of political appointment. This would have terminated the long term control of this important Board by members of the medical profession. It was gratifying to learn that this bill was defeated in the Georgia Legislature. There were some modifications of the Board, but the significant control of the Board by doctors of medicine remains.

All doctors in the Greater Atlanta Area can look with pride on the unusual success of the "Sabin Oral Sunday." Type I oral vaccine was offered on two consecutive Sundays. Seven hundred and fifty thousand citizens of our community took this vaccine. More than a hundred and fifty doctors were active in the promotion and administration of this immunization program. We are hopeful that the subsequent administrations of Type II and Type III will be as successful as the initial venture.

A large part of the success of the SOS Program was due to the continuing efforts to the new Executive Secretary of The Fulton County Medical Society. The Year 1963 should stand out for this matter alone. Mr. John Kiser, who has had a wide experience in administrative matters has been made the Executive Secretary of Fulton County Medical Society. His experience, judgment and continuing vigor in assisting us in our various endeavors is already making its mark.

All doctors in the State will shortly receive a letter from the Saint Paul-Mercury Companies announcing a decrease in the premium of our professional liability insurance. This decrease comes as a result of several

negotiating conferences in which it was demonstrated that the experience in Georgia, although not as good as it should be, was better than was expected. A reference to the letter which doctors will receive will show that our premium structure is considerably below the usual rates charged by the majority of companies writing this line of business. The rate differential is quite drastic in the category of general surgery and the surgical specialists. Continued cooperation among the doctors with the MAG Headquarters Office in administering professional liability claims will undoubtedly continue to give us a successful program. You are encouraged to cooperate, not only in reporting cases of possible professional liability, but also in working with committees who are trying to administer this program.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Fulton				
W. W. Moore				
Atlanta	1014	788	940	728

Charles S. Jones
Councilor
Atlanta

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves and commends the report of the Fulton County Society Councilor. The Committee extends its gratitude for diligence and a job well done in regard to the insurance, polio immunization, and legislative campaigns to help, along with other county medical societies, to prevent the State Board of Health from becoming a laymen's political organization.

HOUSE OF DELEGATES ACTION — Adopted the report of the Fulton County Councilor as recommended by the Reference Committee on motion duly made and seconded.

Fulton County Vice Councilor

LINTON BISHOP, JR., M.D., *Atlanta*

The Vice Councilor has attended Council meetings and has participated when the Councilor was absent.

A primary function of this Vice Councilor has been to carry reports back to his local unit of the views expressed and the problems presented at Council sessions. In addition he has worked with the Councilor in attempting to carry the views of the Fulton County Medical Society on various State problems to the Council.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Fulton County Society Vice Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Fulton County Society Vice Councilor as recommended by the Reference Committee on motion duly made and seconded.

Seventh District Councilor

RALPH N. JOHNSON, M.D., *Rome*

The Seventh District has had a pleasant year. New doctors continue to select our part of the state as a place to practice and we welcome them and northwest Georgia is rapidly becoming an outstanding medical center.

The spring and fall scientific meetings were both interesting and well attended.

Like other sections of the State, we are promoting polio immunization by the "Salk on Sunday" method and long lines of people have been getting their lumps of sugar on Sunday afternoons.

The medical group at Battey State Hospital is continuing its good work in combating tuberculosis and the census is growing smaller each year.

We are all looking forward to another good year.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Bartow				
Virginia D. Hamilton				
Cartersville	8	7	8	7
Carroll-Douglas-Haralson				
J. H. Beall				
Carrollton	36	32	35	302
Chattooga				
Herman E. Spivey				
Summerville . . .	7	7	8	8
Cobb				
E. A. Vaughn				
Marietta	88	83	83	78
Floyd				
Cliff Moore				
Rome	68	59	66	58
Gordon				
Byron Steele				
Fairmont	9	7	9	8
Polk				
William Blanchard				
Cedartown	12	10	14	12
Walker-Catoosa-Dade				
M. K. Cureton				
Lafayette	35	28	34	26
Whitfield				
Donald Thomas . .	35	29	35	27
	298	262	292	254

Ralph M. Johnson
Councilor
Rome

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Seventh District Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Seventh District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Hospital Activities

MILFORD B. HATCHER, M.D., *Chairman*

The new Health Department regulations have been reviewed with interest, and we feel that it is certainly beneficial that the Health Councils which have been appointed will aid in bed determination for particular regions. It is suggested that physicians participate on these Health Councils actively and give the benefit of their medical knowledge as to the bed requirements and they not just be used for political expediency.

There continues to be a disturbing fact in the proper operation of hospitals, namely, the securing of adequate qualified and legalized help, due to the shortage of registered nurses. Too frequently individuals are improperly trained as technicians and do not have any legal status. It is recommended that programs for

proper training of qualified and certified ancillary personnel be inaugurated and pushed by the Medical Association of Georgia.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Hospital Activities Board and recommends that the Georgia Hospital-Medical Council draw up plans and report to MAG in 1965.

HOUSE OF DELEGATES ACTION — Adopted the report of the Hospital Activities Board as recommended by the Reference Committee with the additional recommendation of the Reference Committee on motion duly made and seconded.

Blood Banks Subcommittee

JACK C. NORRIS, M.D., *Chairman*

The work of the Blood Banks Subcommittee during the first part of 1963 has been properly printed in the last report made to the Medical Association of Georgia for review by the House of Delegates at the 1963 Annual Session. Since that time the Subcommittee has not had any problems of urgent importance placed before it which demanded immediate attention.

At the 1963 Annual Session on Jekyll Island, a House of Delegates Reference Committee did not approve a recommendation of the establishment of a division blood banking within the State Department of Public Health. The Reference Committee advocated to the House that two pathologists, actively engaged in blood banking, be appointed to the MAG Subcommittee on Blood Banks. This was done pursuant to a recommendation by the Georgia Association of Pathologists. This recommendation has been carried out.

The Reference Committee, upon recommendation of the Subcommittee on Blood Banks, decided to adopt standards for a blood transfusion service as suggested by the American Association of Blood Banks. Such standards, it was felt would permit uniformity and would be in accord with those standards followed by blood banks throughout the country. This action negated the enormous amount of work performed by our own Blood Banks committeeman, Walter Shepeard. However, he shall be encouraged to continue his work toward the development of blood bank standards as he deems necessary. His work shall be for use by the Subcommittee as reference material and as a source of consultation for the future.

The AMA House of Delegates in December 1963 approved an amendment to its report on blood which stated in essence that a blood bank should be considered a medical facility and that the top authority of any blood bank should be a physician.

The MAG Subcommittee on Blood Banks shall at its next meeting be particularly concerned with the following topics: (1) The storage of blood at low temperatures; (2) The use of a person's own blood for surgery; (3) The interest of public health and the approval of blood banks by the County or District Medical Societies wherever a blood bank exists; (4) Preparation of blood for use in heart surgery; (5) The elimination of commercial blood banks, especially if not directed by physicians and trained lab personnel, and those not having State or Medical Society approval; (6) Further study related to blood bank liability which may be related to malpractice law suits, and; (7) A study of the AMA report of findings and suggestions pursuant to AMA inspection of blood banks in the U. S. as a whole. This shall be made during 1964.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Blood Banks Subcommittee and recommends that the work of the MAG Subcommittee on Blood Banks be continued.

HOUSE OF DELEGATES ACTION — Adopted the report of the Blood Banks Subcommittee as recommended by the Reference Committee with the additional recommendation of the Reference Committee on motion duly made and seconded.

Hospital Relations Subcommittee

MILFORD B. HATCHER, M.D., *Chairman*

This Subcommittee has not had any problems to be presented to it during the year, and as far as can be ascertained the relations of hospitals and other related personnel appear to be coordinated satisfactorily. The Subcommittee on Hospital Relations wishes to commend the Georgia Hospital-Medical Council for the work which they are doing in bringing about harmony between the medical staffs, the administrative staffs, and the trustees, and their accreditation program should be expanded as widely as possible.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Hospital Relations Subcommittee with the same recommendations as for the Hospital Activities Committee, that the Georgia Hospital-Medical Council draw up plans and report to MAG in 1965 in reference to training ancillary personnel for Georgia hospitals.

HOUSE OF DELEGATES ACTION — Speaker Walker recognized Secretary John T. Mauldin who explained that the Georgia Hospital-Medical Council was involved in accreditation programs for smaller hospitals and nursing homes and that in all probabilities they would not be able to undertake a study and report on the training of ancillary personnel for Georgia hospitals. At this time, Braswell Collins made a substitute motion that the MAG Hospital Relations Subcommittee undertake this study. The motion was duly seconded and approved by the House, which then adopted the Hospital Relations Subcommittee report as recommended by the Reference Committee with the amendment noted in the substitute motion made by Delegate Collins.

Insurance and Economics

DAVID R. THOMAS, JR., M.D., *Chairman*

The work of the Board during the past year continues to be primarily concerned with economics affecting the public at large and the profession; insurance coverage available for the public at large and insurance programs for members of the Medical Association of Georgia. The liaison with the insurance industry directly and through the Health Insurance Council has been continued and is felt to be improved. Close liaison with headquarters staff and legal counsel is again acknowledged and it is felt to be very necessary for the proper function of the Board and its Subcommittees.

THE GEORGIA PLAN The Georgia plan continues to function and is felt to be improved over the original plan as conceived some 18 years ago as a means of helping to combat the socialization of medicine. It is still felt that this plan serves a useful purpose and should be continued as a means of offering medical coverage on a service basis for limited income group. During the past year an average of more than one case a week has been referred to Dr. John Elliott and Mr. H. B. Collidge of Savannah, who have continued to very faithfully and satisfactorily act as arbitrators in

the handling of claims where there are differences with the participating insurance carriers; this service has been rendered by Mr. Collidge through the years without compensation and it is felt that consideration must be given to an equitable arrangement for this service. The urgent necessity of doing everything possible to combat the socialization of medicine is necessary and it is felt that this should be continued as one of the efforts.

CONTINUING OF INSURANCE COVERAGE FOR RETIRING EMPLOYEES It is felt that continued work and attention should be given to making insurance coverage available to employees after retirement.

This can best be done by all doctors being made aware of this necessity as well as employers and the insurance industry. It could probably best be accomplished by stressing this fact with the insurance industry and encouraging physicians to discuss this with employers whenever they have an opportunity either when seeing them in their offices or socially. If this is brought to the attention as a matter of policy, many employers can be made to see that it is an advantage in combating government socialization of medical care for the aged.

SELF-EMPLOYED INDIVIDUAL RETIREMENT ACT (Formerly known as HR-10) The Board agreed that because the Keough tax shelter plan is so complex and individual, that each physician should study this plan carefully for his individual needs and further, that as the AMA plan is available, the Insurance and Economics Board does not feel that at this time a MAG plan would have any advantage over the proposed AMA plan. With further changes in the law, it is conceivable that the establishment of a mutual fund on a group basis might be advantageous to the members of the Medical Association of Georgia; continued surveillance is thought to be wise and this should be pursued with the thought of taking advantage of this should it become feasible in the future.

MAG GROUP PLANS The participation in the insurance plans as offered by the Life Insurance Company of Georgia has remained essentially unchanged, though percentagewise with increased membership there is less participation each year. The overall loss ratio experienced by the Life Insurance Company of Georgia during the year 1963 was not bad though the loss ratio on life insurance was very bad.

There was no increase in premiums this year and it is the opinion of several of us, that you cannot adjust premiums every year depending on the loss ratio as this does not give you an overall trend of experience.

We have been advised in the past that it takes three years or more experience to justify any major change in the loss ratio. Our experience with the Life of Georgia has been discussed with representatives of the Company and an attempt made to compare MAG plans with other similar plans. Such a comparison has been difficult because of the coverage that varies so much through Associations and specialty society policies available to the members of the Medical Association of Georgia.

Prior to the time that Life of Georgia was awarded the insurance for members of the Medical Association of Georgia, on a group basis, it was felt that improvements in the coverage were advisable and needed. This was not accepted at that time and we have repeatedly requested a plan that would provide an adequate basic group insurance program for members of the Medical Association of Georgia. The members of the Medical Association of Georgia must realize, that with such a basic plan, it would give them the opportunity to develop such additional coverage as the individual might find best suited to his needs.

Proposals from several companies are being considered and a plan will be presented as an addendum report to the House of Delegates. Careful consideration of MAG group plans by all the members is urgently solicited and necessary to make adequate coverage available to those of us who are uninsurable, at desirable rates, but only by such cooperative group effort can any member of MAG obtain this type of insurance.

LIAISON WITH INSURANCE COMMISSIONER OF THE STATE OF GEORGIA The Honorable Mr. James Bentley, Insurance Commissioner of the State of Georgia and a member of his staff met with the Insurance and Economics Board at their meeting in Atlanta, Georgia on November 3, 1963 to discuss health care insurance, progress and problems.

The Insurance Board found Mr. Bentley to be most cooperative and anxious to help in every way possible to provide all types of insurance coverage in the health insurance field for the citizens of the State of Georgia. Mr. Bentley was particularly interested in the education of the public as to the types of insurance available and especially interested in the progress that has been made and further improvement of mental health coverage.

Both retirement health insurance coverage and plans for increasing such coverage were discussed. Many facets were considered and a possibility of certain Georgia companies going in together to underwrite the health insurance care for the aging citizens was discussed at some length. Mr. Bentley was very interested in doing all that he could in helping to foster such coverage.

There has been considerable correspondence during the year with members of the Medical Association of Georgia concerning the insurance problems of their patients as well as their own group insurance plans. The insurance industry has been found to be very cooperative and their problems, as well as ours, we believe to be real, and we are all anxious to achieve a realistic and yet progressive plan for helping cover the insurance needs, improve medical care and make the free choice of physicians available to the citizens of the State of Georgia, in these constantly changing socioeconomic conditions.

Supplementary Report of Insurance and Economics Board No. J

PACKAGE INSURANCE PLAN

DAVID R. THOMAS, JR., M.D., *Chairman*

An addendum report is necessary because of meetings of the Board in Augusta, April 5, 1964, and in Atlanta, April 18, 1964, that accomplished the following:

STANDARDIZED FORMS:

The Board again calls to the attention of the membership, the fact that a Special Committee arranged, and it was approved by the House of Delegates, that

approved forms might be used in reporting sickness and accident reports to insurance companies. These forms have been approved by the Health Insurance Council, which is supported by most of the major companies of the insurance industry. Also forms for weekly sick and accident claims have been approved by the Health Insurance Council and adopted by the House of Delegates of M.A.G.

It is recommended that if claim forms not approved by H.I.C. and M.A.G. are required that the physician's fee be an individual consideration, and a fee charged commensurate with the time and expense required of the attending physician.

MAG MEMBERSHIP GROUP INSURANCE COVERAGE

For several years it has been apparent that a better insurance program is needed for members of M.A.G. An attempt was being made to provide such programs when our present carrier took over without change of programs then in effect. The fundamental philosophy of insurance coverage is to provide protection that an individual would not be able to provide for himself without undue financial hardship. With this in mind, specifications are being submitted to insurance companies to provide a package type of coverage for members of the Medical Association of Georgia that will make several types of coverage available to members of M.A.G. through age 74 and in the case of Catastrophic or "Major Hospital-Nurse" insurance a plan for life—even after retirement.

LIFE INSURANCE:

a. A $10,000 policy with waiver of premium and accidential death benefits without evidence of insurability.
b. An additional $10,000 can be purchased with evidence of insurability. There will be conversion privileges with all life insurance.

DISABILITY AND DISMEMBERSHIP INSURANCE:

A program is being developed that will give members a multiple choice waiting period that might be to an individual's advantage as well as other opinions for individual consideration. This will make a good basic program through age 74.

MAJOR HOSPITAL-NURSE or CATASTROPHIC INSURANCE:

We are considering increasing the limits to $15,000 for each specific accident or sickness. The coverage for dependent children to be extended to 28 years or as long as the dependent continues as a full time student in an accredited school or college.

An option will be offered to those who feel that they do not desire to include coverage for PRIVATE DUTY NURSES if a substantial reduction in premium can be obtained.

This catastrophic insurance can be continued for life with $7,500 coverage after age 70 and provide protection when it might be most needed.

BUSINESS OVERHEAD EXPENSE:

A Business Overhead Expense policy is being sought that might offer tax advantages and be desired by some members of M.A.G.

INSURANCE FOR EMPLOYEES:

It is desired by many members that an insurance program be provided for faithful, loyal employees.

A plan to include life insurance of $2,000 and a disability program is being devised and plans are to make this available to those who desire such.

These programs should make it possible for us to get a very broad participation. It will make coverage available to fellow members who are not at this time able to get insurance, and for those who are able to get any type of insurance this will provide a good basic program that they can build on with confidence and the assurance that they are getting the best available rates and protection. You will be advised as soon as the program can be put into effect.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Insurance and Economics Board. The Reference Committee recommends that all MAG members study the report when available and review their insurance portfolios with an interest in participating in the new insurance program and extend courtesies to the representatives of the insurance companies. This action also includes the supplemental package insurance parallel plan Number J which is listed as the Supplementary Report of the Insurance and Economics Board No. J — Package Insurance Plan.

HOUSE OF DELEGATES ACTION — Adopted the report of the Insurance and Economics Board and Supplementary Report of Insurance and Economics Board No. J — Package Insurance Plan, as recommended by the Reference Committee, with the additional recommendations of the Reference Committee on motion duly made and seconded.

Relative Value Study Subcommittee

HARRY D. PINSON, M.D., *Chairman*

During the past year we have completed the sending out of questionnaires to physicians in the State of Georgia selected on a random basis and their replies have been compiled and a statistical study made by a qualified statistician. The final report is not available at the present time because the survey and statistical study required more time than anticipated.

Our final report will be submitted as soon as possible.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Relative Value Study Subcommittee and requests that a final report be submitted as early as possible.

HOUSE OF DELEGATES ACTION — Speaker Walker recognized Delegate Harold Harrison who moved in a substitute motion that the Relative Value Study must first go to the county medical societies for review and then go to the House of Delegates for approval before any information on this study may be given to anyone. This substitute motion was duly seconded, and after discussion the substitute motion was adopted as an amendment to the Reference Committee recommendation; and the Relative Value Study Subcommittee Report was adopted as recommended by the Reference Committee with the amendment to the Reference Committee recommendation.

Interprofessional Relations

WILLIAM C. COLES, M.D., *Chairman*

MAG members of the Council of Interprofessional Relations, namely, William A. Wood, Jr., J. Frank Harris, and C. Daniel Cabaniss, were active in the Council which is composed of representatives from MAG, Georgia Pharmaceutical Association, Georgia Dental Association, and Georgia Veterinarian Association.

Drs. Wood and Harris attended the first Medical-Pharmaceutical Congress in Chicago on March 12th and 13th, 1964. The Congress is jointly sponsored by AMA, American Pharmaceutical Association, and the National Association of Retail Druggists.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Interprofessional Relations Board.

HOUSE OF DELEGATES ACTION — Adopted the report of the Interprofessional Relations Board as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of the Medical Defense Committee No. H

REPORT OF MEDICAL DEFENSE COMMITTEE

CHARLES S. JONES, M.D., *Chairman*

At this writing, the doctors over the State have already received a letter from St. Paul Fire and Marine Insurance Company. As was noticed in this communication the fees for professional liability insurance for the year 1964-65 have been reduced. The rates which were stated in the letters are shown here:

	Old St. Paul Program Rates	New St. Paul Program Rates	Standard Rates
Class 1	82.40	62.92	88.58
Class 2	82.40	78.28	111.24
Class 3	203.94	181.28	212.18
Class 4	203.94	181.28	319.30

If comparison is made between the New St. Paul Rates and the Standard Rates, it can be seen that there is a considerable rate saving. For information it should be understood that the Standard Rates are those by the majority of insurance companies who write professional liability in the State of Georgia. The most significant feature of this report is seen under the heading of Class 4. For the doctors of Georgia there is no Class 4. All doctors who do surgery to any degree have been included together in what we call Class 3, and the maximum premium here is $181.28 per year. If the four classifications were used as shown above, the majority of surgeons or the majority of men who do any surgery in Georgia, would be charged $319.30 under the Standard Rate. This is a substantial saving for which your committee is very proud. The duties of the Professional Liability Committee keep the activities rather steady. Annually, it is necessary for the rates to be negotiated with the insurance company. The doctors of Georgia can be assured that your committee is keeping in touch with this whole problem and will do its best to get for ourselves the best possible insurance rate which is justified under the experience which we have in our State.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Medical Defense Subcommittee with commendation, in that insurance rates from the St. Paul Fire and Marine Insurance Company have been lowered for professional liability insurance in Georgia.

HOUSE OF DELEGATES ACTION — Adopted Supplementary Report H — Medical Defense Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Report of the Journal

EDGAR WOODY, JR., M.D., *Editor*

The 1963-64 report of the *Journal* of the Medical Association of Georgia is submitted herewith.

Personnel

Since the last annual report there have been no changes in the personnel connected with the *Journal.* Miss Davis has functioned as Managing Editor now for almost two years and is doing a very satisfactory job.

There have been no changes in our staff of contributing editors. This group continues to be a mainstay in helping the editor in the solicitation of good scientific material and in the writing of scientific editorials. Their assistance has been and will continue to be vital in the publication of the *Journal.*

Conferences

In November of 1963 the Editor and Managing Editor attended the biannual conference sponsored by the State Medical Journal Advertising Bureau in Chicago. Representatives from 33 state medical journals attended this meeting. Many topics were discussed at this meeting, but perhaps the most important topic brought up for consideration was the continued diminution of national pharmaceutical advertising in all of the state journals. The causes and possible remedies were outlined and discussed at length.

Advertising

As mentioned above, advertising revenue from national pharmaceutical houses has continued to diminish during the year just past. Considerable progress has been made on the local level in an effort to attract advertising from state and regional organization. Toward this end the *Journal* has engaged the services of a professional advertising solicitor and so far he has been moderately successful in attracting some new accounts for the *Journal.* Any suggestions for new local advertising prospects over the state will be welcomed by the *Journal* staff and followed up immediately.

Cost Control

Because of the sharp cutback in our advertising revenues and a rise in printing costs during the past year, it has been mandatory that the *Journal* cut back on the volume of its editorial copy. We have made cuts in our copy to the maximum that we consider workable consistent with a quality publication. Each month. The quantity of our editorial material is tailored to balance with our volume of advertising revenues. While this has necessitated the discontinuation of such familiar features as The Yellow Page, Book Reviews, Current Clinical Concepts, and How Well are We Telling our Story, in addition to the cutting of our number of scientific papers from six to four in each issue, we feel that this is essential if we are to preserve the general quality of the *Journal.* Other economy measures have been instituted such as reducing some of the color on certain pages and the use of a slightly lighter paper stock.

Effect of Changes

Even though the year 1963 has been marked by great changes and considerable cutbacks in the thickness of the *Journal,* we believe that little if any quality has been

sacrificed in the general effectiveness of the *Journal*. Since we were faced with the alternative of cutting the quality or cutting the thickness of the *Journal* to meet the financial facts of operation, we believe our new compact version will serve the needs of the Association best.

Credits

We would like to thank the members of the Publications Committee for their wise counsel and help in dealing with our *Journal* problems of the past year.

As in the past we wish to thank Mr. Milton Krueger, Mr. Jim Moffett, Mrs. Wooten, Miss Franklin and the other members of the Headquarters Office staff. They have been of great assistance in many areas of *Journal* activity.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the *Journal of the Medical Association of Georgia* and commends Editor Woody and the entire Journal staff. The necessity for a sustained and increased income to continue such a superior publication as the *JMAG* is recognized. It must be remembered that the major source of income for the *JMAG* is from the advertisers, the majority of whom are drug manufacturers. It behooves all MAG members to visit and attend the various commercial exhibits, as well as give a prompt and receptive ear to each pharmaceutical representative who calls at his office.

HOUSE OF DELEGATES ACTION — Adopted the report of the *Journal of MAG* as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

It was moved by Reference Committee No. 4 Chairman Fred Coleman, Dublin, and duly seconded that the report of the Reference Committee be approved as a whole, as amended, and it was so ordered.

Report of Reference Committee No. 5

H. E. Weems, Perry, Chairman

(*The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendations for action pursant to it taken by the House of Delegates.*)

Reference Committee No. 5 met in the Macon Auditorium Main Meeting Room, Macon, Georgia, at 2:30 P.M. on May 4, 1964. Members present were: H. E. Weems, Perry, Chairman; Preston Ellington, Augusta, Secretary; R. T. Jones, LaFayette; Henry Bridges, Bainbridge; James M. Skinner, Griffin; Oscar S. Spivey, Macon; and Thomas J. Anderson, Jr., Atlanta.

Sixth District Councilor

WILLIAM RAWLINGS, M.D., *Sandersville*

It is the belief of this Counselor that the physicians within the Sixth District have shown, during 1963-64, more interest and participation in the work of the Medical Association of Georgia. A definite general increase in interest in legislative activity has been noted particularly.

The legislators from the component counties have certainly been made aware of the medical profession's position in matters pertaining to the health and welfare. Much credit must be given to the MAG headquarters Staff for an excellent job of informing the membership.

The Sixth District Medical Society will have two good meetings this year. As usual the fall meeting was held in Macon, and the spring meeting in Milledgeville as guest of Baldwin County Medical Society. A committee was appointed by the Society President, Dr. Hugh Sealy, to aid in boosting attendance. This effort will be a continuing one.

The total membership of the District is essentially the same, but I am happy to report a slow, steady increase in AMA membership.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Baldwin				
Harry B. Johnston				
Milledgeville	31	25	33	23
Jasper				
E. M. Lancaster				
Shady Dale	3	3	3	3
Jefferson				
John J. Farris				
Bartow	7	5	7	5
Laurens				
James Kibler				
Dublin	30	15	28	14
Washington				
Dean Holmes				
Sandersville	12	3	12	1
	83	51	83	46

William Rawlings
Councilor
Sandersville

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Sixth District Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Sixth District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Bibb County Councilor

GEORGE H. ALEXANDER, M.D., *Forsyth*

As MAG Councilor, representing the Bibb County Medical Society, I have attended all of the meetings of Council during the year.

It also has been my pleasure to serve during the year as one of the MAG representatives on the Georgia Hospital Medical Council.

During the past year, the Bibb County Medical Society was incorporated and a new Constitution and Bylaws were adopted.

The Society meets monthly, at which time good scientific programs have been presented with the exception of the Annual Meeting which is held in December and the July meeting, at which time it was a social meeting at Lake Sinclair for an outing. No meeting will be held in May because of the Annual Session of MAG.

At the Annual Meeting held in December, 1963, Dr. Braswell Collins, who had been President-Elect, as-

sumed the presidency, and the following officers were elected: Vice President, Dr. Hugh Sealy; President-Elect, Dr. Earl Lewis; Secretary-Treasurer, Dr. John Dupree. Mr. W. D. Clark is employed as Executive Secretary.

During the Winter and Spring months, the Society, along with the societies of several area counties, sponsored a mass immunization program against poliomyelitis using the Sabin oral vaccine. This was a highly successful program and, in addition to benefits from a public aspect, should be of great benefit to medicine in its public relations.

Following is a membership report for the year, along with the report for preceding year for comparison.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Bibb				
John T. Dupree				
Macon	166	151	169	152

George H. Alexander
Councilor
Forsyth

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Bibb County Society Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Bibb County Society Councilor as recommended by the Reference Committee on motion duly made and seconded.

Eighth District Councilor

F. G. Eldridge, M.D., *Valdosta*

The MAG Council held the December Meeting in Valdosta. All meetings of the Council were attended by your Councilor.

The Eighth District Meeting was held in 1963 on August 30-31st, St. Simons, Brunswick. The usual two meetings a year have been changed to a single meeting each year; the meetings to be held in the Brunswick recreational area.

A departure from the usual physician-hospital relationship has occurred in the Eighth District. The Waycross radiological group and the Hospital Authority of the Ware County Hospital were unable to agree on a mutually satisfactory contract; as a result, the separation of charges for technical expenses and "fee for service" was instituted. This is a "first" in Georgia and there has been no authenticated similar situation found in the United States.

As a result of the disagreement, the Georgia Hospital Association, the Radiologic Society of Georgia, and the Council of the MAG was requested to appoint a committee to study and evaluate the situation and recommend guide lines for an agreement. From this action, it is felt that a departure from the ever growing tendency toward corporate practice of medicine will result, and may eventually lead to complete cessation of corporate practice concept.

Counties and Secretaries	*Members December 31, 1963*		*Members December 31, 1962*	
	MAG Total	*AMA Dues Paying Only*	*MAG Total*	*AMA Dues Paying Only*
Altamaha				
Horace L. Morgan				
Baxley	9	8	10	9
Camden-Charlton				
H. H. Robinson				
Kingsland	9	9	8	8
Coffee				
C. S. Meeks, Jr.				
Douglas	11	5	14	7
Glynn				
George B. Wheeler				
Brunswick	46	41	44	40
South Georgia				
B. S. Davis				
Valdosta	57	51	56	47
Telfair				
D. B. McRae				
McRae	6	5	6	6
Ware				
J. Duncan Farris				
Waycross	42	42	45	36
Wayne				
Daniel H. G. Glover	10	9	10	8
	190	170	193	161

F. G. Eldridge
Councilor
Valdosta

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Eighth District Councilor.

HOUSE OF DELEGATES ACTION — Adopted the report of the Eighth District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Medical Education

Thomas W. Goodwin, M.D., *Chairman*

It is believed that the activities of the Board of Medical Education of the Medical Association of Georgia should be mainly confined to two fields; (1) Undergraduate medical education, and (2) Postgraduate medical education. Many problems are posed in both fields.

There has been a great change in undergraduate medical education during the past few years. This has come about as a result of socio-economic factors which by and large are beyond the control of the medical schools. One of these factors is the increasing trend toward specialization in medicine. At the present time less than forty percent of the graduates of the Medical College of Georgia entertain any thought of going into general practice. This is due no doubt to the increasing urbanization of our population and the increase in the means of rapid transportation, which puts the greater portion of our people within range of urban medical centers.

The House of Delegates of the Medical Association of Georgia took cognizance of this fact last year when it passed a resolution asking the Committee on Medical Education to contact the medical schools in regard to increasing the output of general practitioners in Georgia. In line with this request, the chairman of your Board attended the annual curriculum committee meeting of the Medical College of Georgia in January of this year. From the discussions which ensued, it became fairly clear that the present trend in medical education is against doing anything about this problem in the undergraduate years. Rather is the trend the

other way, with medical schools, by means of elective courses, encouraging students to follow their own bents in the specialties fairly early. There also is an increasing trend to research in pure science, which is also crowding its way into the curriculum.

The solution to the problem really seems to lie in the immediate years of training which follow graduation. Increasing numbers of hospitals seem to be becoming interested in combined internship and general practice residency programs. These are two year courses in which the basic knowledges necessary to general practice are covered. The encouragement of this sort of thing in the non-teaching hospitals and in the smaller hospitals in our State could well become the concern of the Medical Association of Georgia. It is felt that our emphasis should lie here rather than in the medical schools per se, whose philosophy seems to be increasingly oriented in the other direction.

In so far as postgraduate medical education is concerned, again there are problems. Shortly after World War II the medical schools in this country abrogated their responsibility in this field to the specialty societies, which were then beginning to reach the zenith of their influence. This trend is just now being reversed again. Both of our medical schools are now conducting excellent and frequent postgraduate refresher courses in a variety of fields. These, however, do not reach the majority of the doctors in Georgia.

Recently the Georgia Academy of General Practice has taken a great stride forward in this area. They have instituted a series of regional programs in conjunction with the medical schools' faculties and under the sponsorship of the pharmaceutical houses. These meetings are to be held in strategic areas of the State; outstanding programs are being planned; guest speakers brought in; and credit given for attendance. The Medical Association of Georgia could well get behind such programs by combining these meetings with the district meetings of the medical societies. This certainly would be one way in which the attendance at the district meetings could be improved and the district societies strengthened.

It is felt that during the coming year the Board on Medical Education should pursue these two lines of endeavor; namely, the encouragement of the setting up of more general practice residencies in the hospitals of Georgia and the fostering of regional meetings in conjunction with the district medical societies. Toward these two goals we shall work.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with condemnation the report of the Medical Education Board.

HOUSE OF DELEGATES ACTION — Adopted the report of the Medical Education Board as recommended by the Reference Committee on motion duly made and seconded.

AMA-ERF Subcommittee

BRASWELL COLLINS, M.D., *Chairman*

The purpose of the American Medical Association Education and Research Foundation is to help Medical Schools arrange scholarship loans to medical students and to further medical teaching. There is a great need for finances beyond the annual budget of a school.

The program was started in March 1962, to help qualified, needy medical students, interns, and residents during their years of training. The loan program is now nearing $18,000,000 with nearly one out of every ten medical students receiving needed aid. Commercial banks make the loans up to $12.50 for each dollar in the fund as security. This has been one of the most successful programs of the AMA. This program has enabled more than 8,000 medical students, interns and residents to borrow funds to continue their training.

Funds may be contributed directly to a school, through alumni associations or through AMA-ERF earmarked for any specific school. One advantage in contributing through the AMA-ERF is to have a record of what doctors are doing on a national scale for the medical profession instead of relying on the government. These contributions are income tax deductible. Individuals or organizations may send their financial aid directly to AMA-ERF or through our MAG.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the AMA-ERF Subcommittee.

HOUSE OF DELEGATES ACTION — Adopted the report of the AMA-ERF Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Clarkesville Lab Subcommittee

BEN K. LOOPER, M.D., *Chairman*

During 1963, the course for Medical Laboratory Assistants at the North Georgia Technical and Vocational School, Clarkesville, Georgia sought and obtained approval for the training of Certified Laboratory Assistants from the Board of Certified Laboratory Assistants which is sponsored by the American Society of Clinical Pathologists. Graduates of the program are now eligible for associate membership in the Georgia Society of Medical Technologists and for similar membership in the American Society of Medical Technologists. Over three-fourths of the graduates of the program have applied, or are in the process of applying, for both memberships. The school is receiving some publicity through the National Committee for Careers in Medical Technology and a number of inquiries have been received concerning the program from over the nation.

The school continues to accept two classes each year. In addition to students currently enrolled at Clarkesville, trainees are in hospitals in Gainesville, Rome, LaGrange, Macon, Americus, and Atlanta. It would appear that the program is accomplishing its objectives and it is a fact that graduates of the program are contributing to the improvement of the overall picture of medical care in the state.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Clarkesville Lab Subcommittee with the recommendation from the Reference Committee that Council appoint a committee to consider the problem of educating para-medical personnel in the State of Georgia and that Council submit recommendations to the House of Delegates at the 1965 Annual Session. This Reference Committee realizes there are deficits in this field of education and that very immediate means should be made to remedy this problem.

HOUSE OF DELEGATES ACTION — Adopted the report of the Clarkesville Lab Subcommittee as recommended by the Reference Committee with the additional recommendations of the Reference Committee on motion duly made and seconded.

Occupational Health

T. A. PETERSON, M.D., *Chairman*

I have attended to all matters that have come before me as Chairman of the above named Board. Due to matters of personal importance I was prevented from attending the Annual AMA Congress on Occupational Health.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves the report of the Occupational Health Board.

HOUSE OF DELEGATES ACTION — Adopted the report of the Occupational Health Board as recommended by the Reference Committee on motion duly made and seconded.

Rural Health Subcommittee

THOMAS N. LUMSDEN, M.D., *Chairman*

The Subcommittee on Rural Health at its initial 1963 meeting elected to serve as a liaison agent and on a consulting basis representing the Medical Association of Georgia with the various organizations concerned in the field of Rural Health. Subsequently the President of the Georgia Farm Bureau, and members of the Extension Service of the University of Georgia were contacted and interest in the health programs sponsored by these groups was expressed. As an outgrowth of this this Subcommittee was asked to send a representative to serve on the panel of judges for the Georgia 4-H Clubs' Health Projects. This was done and interest of the 4-H Club Members in health programs was stimulated.

On the national level two members of this Subcommittee represented the Medical Association of Georgia at the American Medical Associations' Conference on Rural Safety held in Chicago in April. A member also attended the National Conference on Rural Health at Hot Springs, Arkansas in September.

At the first meeting of this Subcommittee for the current year at MAG Headquarters Dr. Francis T. Holland, Regional Councilor on Rural Health for the American Medical Asociation, met with members of the Subcommittee to aid in formulating plans for the coming year. Projected is a program implementing AMA's current drive to encourage adult tetanus protection as well as emphasis on other adult immunizations and wider use of the personal medical identification and information cards.

Currently this Subcommittee is participating in the formation of an Advisory Committee for Georgia Teenage Health Education Program. Participating in this are representatives of the Georgia Dental Asosciation, State Department of Education and the Florida Citrus Commission, Georgia Department of Public Health and Georgia Dietetic Association. Current plans call for a weekend seminar to be made available to teachers over the state who are dealing with teenagers. It is anticipated this program will help them in stimulating interest to this age group in more adequate nutrition.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Rural Health Subcommittee.

HOUSE OF DELEGATES ACTION — Adopted the report of the Rural Health Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Medical School Course Subcommittee No. C

REPORT OF SUBCOMMITTEE ACTIVITIES

T. A. SAPPINGTON, M.D., *Chairman*

The Medical Association of Georgia Sub-Committee on Medical School Courses met at MAG Headquarters in Atlanta. Dr. Harry B. O'Rear from the Medical College of Georgia, Dr. Tom Sellers, Jr. from Emory University, and Dr. T. A. Sappington were present.

The courses were discussed and Dr. O'Rear felt it would be of definite value to offer the series of lectures to the Senior students at the Medical College of Georgia again this year. Dr. O'Rear had previously expressed his desire to have the lectures continued.

The topics and speakers were decided upon and these lectures have been given and have been well attended at Augusta.

Emory did not choose to have these lectures offered there, so they were not given at Emory again this year.

The following is a schedule of the topics given at the Medical College of Georgia:

"THE ART OF THE PRACTICE OF MEDICINE"

1964 Course Schedule

Small Auditorium — Medical College of Georgia

February 8—12:00 noon

"TYPE OF PRACTICE AND WHERE TO PRACTICE"—
Norman P. Gardner, M.D., Thomaston

February 22—12:00 noon

"OPENING THE OFFICE AND LICENSURE"—
H. Hilt Hammett, Jr., M.D., LaGrange

March 7—12:00 noon

"ECONOMICS OF AN OFFICE PRACTICE"—
T. A. Sappington, M.D., Thomaston

March 21—12:00 noon

"CONTINUING MEDICAL EDUCATION"—
Linton H. Bishop, M.D., Atlanta

April 4—12:00 noon

"RELIGION AND MEDICINE"—
(Speakers to be arranged by MCG)

April 17—(time and place)—

"M.D.'S PERSONAL ECONOMICS"—
Wives Cordially Invited
Mr. Gerry R. Holden, Jr., Potter-Holden & Company, Atlanta

Your Sub-Committee Chairman feels that these lectures are of definite value to senior students and should continue to be given at the Medical College of Georgia and at Emory University if they should decide that they want them given.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation Supplementary Report C — Medical School Course Subcommittee.

HOUSE OF DELEGATES ACTION — Adopted the Supplementary Report No. C — Report of Medical School Course Subcommittee, as recommended by the Reference Committee on motion duly made and seconded.

Cancer Subcommittee

ROBERT C. PENDERGRASS, M.D., *Chairman*

The members of the Subcommittee on Cancer, namely Dr. Robert Brown, Dr. Ralph Davis, Dr. John Mauldin, Dr. Thomas Harrold, Dr. Hoke Wammock, Dr. Harry McGee and myself have kept in close touch with Dr. W. J. Murphy, Director of Cancer Control. We have exchanged correspondence with Dr. Murphy relative to the operation of the State-Aid Clinics. Particular attention has been paid to the question of finances. At the present writing, it appears that we may be able to operate the State-Aid Clinics until July 1, 1964, provided every possible economy is carried out. Dr. Murphy has submitted a budget for the coming year but I do not have information just now as to whether or not the budget has been approved. Some additional funds have been allotted to the program by Dr. Venable, Director of the Department of Public Health.

The committee has held several conferences with Directors of State-Aid Clinics and another such meeting is scheduled for May 5.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Cancer Subcommittee.

HOUSE OF DELEGATES ACTION — Adopted the report of the Cancer Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Mental Health Subcommittee

JAMES N. BRAWNER, JR., M.D., *Chairman*

Conforming to the program of activity outlined in last year's report to the House of Delegates, the Subcommittee's initial effort was to encourage active mental health committees in all county medical societies and their auxiliaries. Each Subcommittee member was urged to stimulate communication between the State and local societies of his district and to support mental health programs of other organizations. Along with similar efforts of the state Auxiliary Mental Health Committee, local interests have been stirred and we hope will continue to grow. The Mental Health Page of J.M.A.G. has been used for current articles of interest to all physicians and which pertained to the national and local mental health programs. This seems to be the best means by which our needs and efforts can be made known to Georgia physicians.

The meetings of the Subcommittee were all well attended. Several matters of importance were discussed and recommendations made to Council. In addition to matters pertaining to organization and communication, one of the most urgent needs was to have M.A.G. and all its members give full support to broader insurance coverage for patients with mental illness and equal to that for any other illness. The Subcommittee Chairman served also as chairman of the Mental Illness Insurance Study Committee appointed by the Honorable James L. Bentley, Comptroller General. If non-profit and commercial insurance companies provide such coverage in many other states, they should certainly do so in Georgia. Council has approved such recommendations and implementation must be sought.

The major project of the Subcommittee was to sponsor jointly with M.A.G. Auxiliary Mental Health Committee, a seminar on mental health for all Georgia physicians and their wives. This meeting was held at the Milledgeville State Hospital on Sunday, February 9, 1964. There was an attendance of around 200, and those participating presented an excellent discussion of "Georgia's Mental Health Program — What Can We Do Now?" A copy of the program is available.

The Chairman of this Subcommittee in company of M.A.G. Executive Secretary, and the Director of our Division of Mental Health, attended the Tenth Annual Conference of Mental Health Representatives of State Medical Associations which is sponsored annually by the Council on Mental Health of the A.M.A. A report on this meeting was submitted to Council. Here it was announced that A.M.A. has also arranged for the Second National Congress on Mental Illness and Health to be held in November 1964, the general theme of which will be: "Community Mental Health Resources," and "Ways in Which the Non-Psychiatric Physician Can Participate." All physicians are urged to attend.

A series of recordings available for radio stations, have been prepared by A.M.A. on thirteen different subjects pertaining to mental health. These can be obtained from M.A.G. Headquarters, the Subcommittee on the Georgia Association for Mental Health.

Details of the Subcommittee's meetings and all recommendations to Council are recorded in our minutes. Your Subcommittee has divided itself into members with terms of one, two and three years respectively. Therefore, three new members will be added for the coming year to replace those whose terms expire. Much remains to be done, and sustained effort will be required for many years to achieve our goal in this vast area of mental illness and mental health. In order to maintain leadership and guidance, to emphasize the importance of private enterprise in the practice of medicine, all physicians, individually and collectively, must participate in our mental health programs.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee approves with commendation the report of the Mental Health Subcommittee.

HOUSE OF DELEGATES ACTION — Adopted the report of the Mental Health Subcommittee as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 4

HONORING CONGRESSMAN CARL VINSON

BRASWELL COLLINS, M.D.

WHEREAS, the Honorable Carl Vinson has represented Georgia in the Congress since November, 1914, having served with honor and distinction for the past 50 years, and

WHEREAS, he has served the nation and the State of Georgia longer than any person in the history of the Republic and has demonstrated his astute and inordinate leadership in the field of military and naval preparedness, and

WHEREAS, all Georgians have shared in the honor and distinction he has brought to the State of Georgia by reason of his long, faithful, dedicated and productive service to the nation and the defense of the free world,

NOW, THEREFORE, BE IT RESOLVED that the House of Delegates of the Medical Association of

Georgia does hereby acknowledge a debt of gratitude to Congressman Carl Vinson for his untiring efforts in behalf of good, representative government in the Congress during the last half century, and

BE IT FURTHER RESOLVED that this House does wish him well in any future endeavor which he may undertake.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee recommends that Resolution No. 4 — Honoring Congressman Carl Vinson, be adopted.

HOUSE OF DELEGATES ACTION — Adopted Resolution No. 4 — Honoring Congressman Carl Vinson, as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 6

PROMOTE INSURANCE COVERAGE FOR MENTAL ILLNESS

CHARLES FULGHUM, M.D. and

TOM ANDERSON, M.D.

WHEREAS, Hospitalization and medical fee insurance provided by a number of commercial companies as well as by Blue Cross & Blue Shield organizations doing business in Georgia is inadequate, denied by specific exclusions, or by devious means such as the use of an arbitrary definition of a hospital irrespective of its recognized qualifications, and the fact that the insured often believes that all illnesses are covered, and

WHEREAS, the Georgia Psychiatric Association, the Georgia Association for Mental Health, the National Association of Private Psychiatric Hospitals and other interested groups, have given approval of insurance coverage for mental illness without restrictions or exceptions, and

WHEREAS, the Medical Association of Georgia has previously reaffirmed its approval of a broad insurance coverage in the State of Georgia for patients with mental illness who require treatment in General Hospitals and in qualified private psychiatric hospitals.

NOW THEREFORE BE IT RESOLVED that the Medical Association of Georgia in its continued effort to hasten this insurance coverage as an important part of our Mental Health Program, instruct the Secretary to send a copy of this resolution to the Honorable Carl Sanders, Governor; to the Honorable James Bentley, Comptroller General and Insurance Commissioner, and to each member of this Association; and

BE IT FURTHER RESOLVED that this Association in its effort to hasten this insurance coverage advise the people of Georgia through the accepted news media of the inadequacies that still may exist in their insurance programs.

REFERENCE COMMITTEE RECOMMENDATION — The Reference Committee recommends that Resolution No. 6 — Promote Insurance Coverage for Mental Illness, be adopted.

HOUSE OF DELEGATES ACTION — Adopted Resolution No. 6 — Promote Insurance Coverage for Mental Illness, as recommended by the Reference Committee on motion duly made and seconded.

It was moved by Reference Committee No. 5 Chairman H. E. Weems, Perry, and duly seconded that the report of the Reference Committee be approved as a whole and it was so ordered.

Speaker Walker then called for unfinished business and there being none, Dr. Walker opened the floor for new business. There being no new business, Speaker Walker thanked each and every member of the Reference Committee for their diligent work and entertained a motion for adjournment of the Second Session of the Medical Association of Georgia House of Delegates in conjunction with the 110th Annual Session of the Association. On motion duly made and seconded the House adjourned at 10:10 A.M.

MAG GENERAL BUSINESS SESSION (First Session)

110TH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA

SUNDAY, MAY 3, 1964

THE FIRST GENERAL BUSINESS SESSION of the 110th Annual Session of the Medical Association of Georgia was called to order by President George Dillingar, Thomasville, at 2:00 P.M. in the Main Meeting Room, Macon Auditorium, Macon, Georgia, on May 3, 1964.

President Dillinger stated that the purpose of this first General Business Session was to nominate MAG Officers, Councilors and Vice Councilors, AMA Delegates, and also to receive nominations for the MAG "General Practitioner of the Year Award." Dr. Dillinger further stated that after this business was completed the traditional MAG "Memorial Service" would be held to honor the memory of those colleagues who have passed away since the last Annual Session.

President Dillinger called on Dr. Thomas Goodwin of Augusta, who gave the Invocation. President Dillinger then appointed a Tellers Committee with Thomas Goodwin of Augusta, Chairman, and Fred H. Simonton of Chickamauga and Milford B. Hatcher of Macon as members of the Committee. Dr. Dillinger announced that the hours for balloting on nominations made at this session were as follows: May 3—3:00 P.M. to 5:00 P.M.; May 4—9:00 A.M. to 1:00 P.M.; and May 5—9:00 A.M. to 5:00 P.M.; at which time the ballot box would officially close.

Nominations

President Dillinger then called for nominations from the floor for Association officers and the following nominations were made:

President-Elect—George Alexander, Forsyth; nominated by T. A. Sappington, Thomaston; seconded by Virgil Williams, Griffin.

There being no other nominations for the office of President-Elect, it was duly moved and seconded that nominations be closed and President Dillinger instructed the Secretary to cast a unanimous ballot for George Alexander as President-Elect of the Medical Association of Georgia.

Second Vice President—Henry Jennings, Gainesville; nominated by Waddell Barnes, Macon; seconded by John Elliott, Savannah, and Linton Bishop, Atlanta.

There being no other nominations for the office of Second Vice President, on motion duly made and seconded, the nominations were closed and President Dillinger instructed the Secretary to cast a unanimous ballot for Henry Jennings as Second Vice President of the Medical Association of Georgia.

President Dillinger then referred to Chapter V, Section 2 of the MAG Constitution and Bylaws as follows: "Nominations for Councilor or Vice Councilor shall be made by each district society at its annual meeting and forwarded by its secretary to the secretary of MAG not later than 15 days before the Annual Session. If no nomination is presented by a district society, nominations shall be made from the floor . . . nominations from county medical societies are handled in like manner."

President Dillinger stated that he had properly received the following nominations from the district and county societies in advance of this meeting and that no nominations from the floor would be in order for the following offices:

First District Councilor (1967)—Charles E. Bohler, Brooklet.
First District Vice Councilor (1967)—William Simmons, Sylvania.
Second District Councilor (1967)—W. Frank McKemie, Albany.
Second District Vice Councilor (1967)—J. C. Brim, Pelham.
Third District Councilor (1967)—Frank Wilson, Leslie.
Third District Vice Councilor (1967)—Joseph T. Christmas, Vienna.
Fourth District Councilor (1967)—Virgil B. Williams, Griffin.
Fourth District Vice Councilor (1967)—Charles T. Cowart, LaGrange.
Georgia Medical Society Councilor (1967)—Walter Brown, Savannah.
Georgia Medical Society Vice Councilor (1967)—T. A. Peterson, Savannah.

President Dillinger then stated under the authority of the Constitution and Bylaws, he would instruct the MAG Secretary to cast a ballot in behalf of the membership for these nominations as presented by their respective District and County Medical Societies and thereby declare the nominees so elected.

In addition to the nominations of Councilors and Vice Councilors whose terms have expired, Dr. Dillinger stated, nominations received from District and County Medical Societies, whose present Councilor or Vice Councilor resigned prior to the expiration of their terms in office, were the next order of business. President Dillinger said that in such cases the respective District or County Medical Society had submitted new nominations to serve for the unexpired term of Councilor or Vice Councilor who has resigned, and these nominations were as follows:

Muscogee County Medical Society Vice Councilor (1965) Roy L. Gibson, Columbus.
Bibb County Medical Society Vice Councilor (1966)—Braswell E. Collins, Macon.

President Dillinger stated that as these nominees to fill the unexpired term of office were received in proper form that he would instruct the MAG Secretary to cast a ballot in behalf of the membership, and thereby these men were so elected.

AMA Delegate (term beginning January 1, 1965)—Henry Tift, Macon; nominated by Charles Richardson, Sr., Macon; seconded by Milford Hatcher, Macon.

There being no further nominations, no motion duly made and seconded, it was voted to close the nominations and President Dillinger instructed the Secretary to cast an unanimous ballot for the election of Henry Tift as AMA Delegate.

AMA Alternate Delegate (term beginning January 1, 1965)—Preston Ellington, Augusta; nominated by R. C. McGahee, August; seconded by A. J. Green, Augusta.

There being no further nominations, on motion duly made and seconded, it was voted to close the nominations and President Dillinger instructed the Secretary to cast a unanimous ballot for the election of Preston Ellington as AMA Alternate Delegate.

AMA Delegate (term beginning January 1, 1965)—J. Frank Walker, Atlanta; nominated by Walter Brown, Savannah; seconded by Luther Wolff, Columbus.

There being no further nominations, on motion duly made and seconded, it was voted to close the nominations and President Dillinger instructed the Secretary to cast a unanimous ballot for the election of J. Frank Walker as AMA Delegate.

AMA Alternate Delegate (term beginning January 1, 1965)—Thomas Goodwin, August; nominated by A. G. LeRay, Thomson; seconded by C. E. Bohler, Brooklet, and Addison Simpson, Washington.

There being no other nominations, on motion duly made and seconded it was voted to close the nominations and President Dillinger instructed the Secretary to cast an unanimous ballot for the election of Thomas Goodwin as AMA Alternate Delegate.

At this time President Dillinger then stated that since there were no contested offices, the Tellers Committee need not conduct general balloting for Association Officers.

GP of the Year Award

President Dillinger called for nominations for the "General Practitioner of the Year Award." The following nominations were made:

J. D. Applewhite, Macon: nominated by Charles Rumble, Macon; seconded by Braswell Collins, Macon.

H. E. Griggs, Conyers: nominated by Bob Martin, Conyers; seconded by J. D. Martin, Atlanta.

Dr. Dillinger announced that these nominations were now officially received and that the House of Delegates would select from these two nominations the 1964 recipient of the "General Practitioner of the Year Award," which would be presented at the final General Business Session May 6.

MAG Memorial Service

President Dillinger led the House of Delegates with the 23rd Psalm in memory of those Medical Association of Georgia members deceased during the past year. Following this prayer, Dr. Dillinger read the names of these departed colleagues:

Carl L. Anderson, Macon, February 6, 1964
I. G. Armistead, Townsend, July 3, 1963
F. M. Atkins, Atlanta, March 25, 1964
L. A. Bailey, Milledgeville, August 11, 1963
H. L. Barker, Carrollton, September 14, 1963
B. B. Barmore, Jr., Thomaston, January 14, 1964
D. P. Belcher, Pelham, April 13, 1963
E. L. Bishop, Atlanta, August 12, 1963
Bingley L. Burdick, Valdosta, August 22, 1963
A. J. Collinsworth, Atlanta, April 25, 1964
W. C. Dabney, Ocean Springs, Mississippi, January 14, 1964
W. A. Davis, August 30, 1963
A. H. Fowler, Marietta, December 8, 1963
Lon W. Grave, Atlanta, October 9, 1963
Nim J. Guthrie, Atlanta, September 23, 1963
H. C. Holliday, Athens, March 6, 1963
R. L. Johnson, Douglas, May 14, 1963
A. J. Kelley, Savannah, July 5, 1963
Polk S. Land, Columbus, August 7, 1963
J. A. Leaphart, Jesup, April 24, 1963
Robert C. Major, Augusta, May 13, 1963
Thomas V. Matthews, Atlanta, August 23, 1963
W. E. Mayher, Columbus, May 25, 1963
Ricardo Mestre, Marietta, August 5, 1963
F. C. Mims, Decatur, April 22, 1964
R. C. Montgomery, Butler, November 10, 1963
Frank K. Neill, Albany, July 7, 1963
Charles E. Pattillo, Decatur, December 16, 1963
J. B. Peniston, Newnan, October 19, 1963
W. F. Reavis, Eustis, Florida, August 16, 1963
J. C. Rollins, College Park, October 22, 1963
H. J. Rosenberg, Atlanta, May 31, 1963
Warren M. Russell, Augusta, January 11, 1964
Dan Y. Sage, Atlanta, December 31, 1963
A. W. Simpson, Washington, November 12, 1963
Otis A. Sims, Dalton, May 4, 1963
Melvin Ernest Smith, Milledgeville, December 18, 1963
C. E. Stapleton, Statesboro, November 10, 1963
W. E. Storey, Columbus, March 2, 1964
John A. Thurston, Atlanta, June 8, 1963
J. W. Wallace, Douglas, February 9, 1964
Charles N. Wasden, Macon, March 31, 1964
E. W. Watkins, Ellijay, October 30, 1963
J. W. Watts, Bowdon, March 2, 1964
A. A. Weinstein, Atlanta, February 25, 1964

There being no further business, the First General Business Session of the 110th Annual Session of the Medical Association of Georgia was recessed at 3:00 P.M.

MAG GENERAL BUSINESS SESSION (Second Session)

110TH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA

MONDAY, MAY 4, 1964

The Second General Business Session of the 110th Annual Session of the Medical Association of Georgia was called to order by President George Dillinger, Thomasville, at 12:00 Noon in the Main Meeting Room, Macon Auditorium, Macon, Georgia, on Monday, May 4, 1964.

The Invocation was given by the Reverend James R. Webb, Pastor of the Vineville Methodist Church of Macon.

A word of welcome was given by Braswell E. Collins, President of the Bibb County Medical Society, in behalf of the membership of the Society, as hosts for this 110th Annual Session.

The Honorable B. F. Merritt, Mayor of the City of Macon, welcomed the Medical Association of Georgia membership and their wives to the central city of Georgia on the occasion of this annual meeting.

President George Dillinger then turned over the gavel to First Vice President Walker Curtis, Atlanta, who presided at this point. Dr. Curtis introduced President Dillinger who addressed the Association on the subject: "Report of the Presidential Year, 1963-64." On the completion of the President's speech, Dr. Dillinger again assumed the duties of presiding officer.

President Dillinger then introduced President-Elect J. G. McDaniel of Atlanta, who presented an address to the Association membership on the subject: "Our Association's Future for 1964-1965."

Upon completion of the address by President-Elect J. G. McDaniel, President Dillinger recessed the second General Business Session of the 110th Annual Session of the Medical Association of Georgia at 1:30 P.M.

MAG GENERAL BUSINESS SESSION (Third Session)

110TH ANNUAL SESSION OF THE MEDICAL ASSOCIATION OF GEORGIA

WEDNESDAY, MAY 6, 1964

THE THIRD GENERAL BUSINESS SESSION of the 110th Annual Session of the Medical Association of Georgia was called to order by President George Dillinger, Thomasville, at 10:30 A.M. in the Main Meeting Room, Macon Auditorium, Macon, Georgia, on May 6, 1964.

Fifty-Year Certificates

President Dillinger called on Immediate Past-President Thomas Goodwin of Augusta, who presented the Fifty-Year Certificates and Pins to physician members who have practiced medicine for 50 years or more. These presentations were made to the following physicians:

Edwin Whitaker Allen, Milledgeville; Leland Green Baggett, Atlanta; Benjamin T. Beasley, Oakwood; John Robert Childs, Atlanta; George Washington Fuller, Atlanta; John A. Hunnicutt, Athens; James A. Johnson, Manchester; Luther Hilliard Kelley (Deceased), Atlanta; Robert Edwin McClure, Atlanta; Joyce Ferdinand Mixson (Deceased), Valdosta; Robert C. Montgomery, Butler; James Calvin Morgan, West Point; Joseph Jephtha Nutt, Bowdon; Charles Edward Rushin, Atlanta; Wesley C. Thomas, Brunswick; John A. Thurston (Deceased), Atlanta; and Stephen T. Brown, Atlanta.

Scientific Exhibits Awards

President Dillinger called on Edgar Grady of Atlanta, Chairman of the Association Scientific Exhibit Awards Committee, who made the following presentations:

First Place Award — "The Mesh Skin Graft" —
J. C. Tanner, Jr., M.D.; Jacques Vandeput, M.D.; and William H. Gradley, B.S., Atlanta.

Second Place Award — "Relief of Pain After Tonsillectomy" —
Joel P. Smith, M.D.; James T. King, M.D.; Nathan I. Gershon, M.D.; and William R. Fisher, M.D., Atlanta.

Third Place Award — "Modern Diagnostic Aids in Hearing Disorders" —
John S. Turner, Jr., M.D.; John H. Per-Lee, M.D.; and Julia Williams, M.Ed., Emory University Division of Otolaryngology, Section on Otology, Atlanta.

GP of the Year Award

President Dillinger called on Dr. Albert Morris of Fairburn, President of the Georgia Academy of General Practice, to present the GP of the Year Award. Dr. Morris presented the "General Practitioner of the Year Award" to J. D. Applewhite of Macon.

Other Awards

President Dillinger announced that the secret committee constituted to judge recipients for the Hardman Award decided not to award this high honor for 1964. Dr. Dillinger also announced that as no nominations for the Medical Association of Georgia Distinguished Service Award had been received that this award would not be presented in 1964.

MAG Certificates of Appreciation

President Dillinger asked John T. Mauldin, Atlanta, Secretary of the Medical Association of Georgia, to present the following Certificates of Appreciation. Dr. Mauldin then presented these Certificates of Appreciation in behalf of the Association:

George R. Dillinger, M.D., Thomasville, for service as MAG President 1963-64; George H. Alenxander, M.D., Forsyth, Bibb County Medical Society Councilor; Walker L. Curtis, M.D., Atlanta, First Vice President 1963-64; Mrs. John E. Porter, Savannah, President of the Woman's Auxiliary to the Medical Association of Georgia 1963-64; Peter Hydrick, M.D., East Point, Chairman of the MAG Annual Session Board; Eustace Allen, M.D., Atlanta, MAG Delegate to the AMA House of Delegates; James N. Brawner, M.D., Atlanta, Chairman MAG Mental Health Subcommittee; W. L. Pomeroy, M.D., Waycross, Vice Chairman MAG Insurance and Economics Board; Miss Dana Hudson, Atlanta, Past-President Georgia State Nurses Association; Harmon Caldwell, Ph.D., Atlanta, Chancellor University System of Georgia; L. R. Siebert, Atlanta, Secretary-Treasurer, State Medical Education Board; Jack Nelson, Atlanta, for his interest in the field of mental health and for his reporting of the Milledgeville Hospital story.

Site of 1966 Annual Session

President Dillinger announced that the site for the 1965 MAG Annual Session had been previously set for Augusta, Georgia, on invitation of the Richmond County Medical Society. Dr. Dillinger then called for invitations to MAG to convene the 1966 Annual Session. Charles R. Smith, Columbus, representing the Muscogee County Medical Society, was recognized and rendered an invitation to the Association to hold its 1966 Annual Session in the city of Columbus; and the invitation was so accepted.

Election Results

President Dillinger stated that none of the elective offices of the Association were contested and he had instructed the Secretary of the Association to cast an unanimous ballot electing those nominees made at the first General Business Session held May 3, 1964.

Installation of Officers

The next order of business was the installation of the 1964-65 Officers and Councilors as follows:

President—J. G. McDaniel, Atlanta (1965)
President-Elect—George Alexander, Forsyth (1965)
Immediate Past President—George Dillinger, Thomasville (1965)

First Vice President—Kirk Train, Savannah (1965)
Second Vice President—Henry Jennings, Gainesville (1965)
Secretary—John T. Mauldin, Atlanta (1966)
AMA Delegate—(term beginning January 1, 1965)—Henry Tift, Macon (December 30, 1967)
AMA Alternate Delegate—(term beginning January 1, 1965)—Preston Ellington, Augusta (December 30, 1967)
AMA Delegate—(term beginning January 1, 1965)—J. Frank Walker, Atlanta (December 30, 1967)
AMA Alternate Delegate—(term beginning January 1, 1965)—Thomas Goodwin, Augusta (December 30, 1967)
First District Councilor—Charles E. Bohler, Brooklet (1967)
First District Vice Councilor—William Simmons, Sylvester (1967)
Second District Councilor—W. Frank McKemie, Albany (1967)
Second District Vice Councilor—J. C. Brim, Pelham (1967)
Third District Councilor—Frank A. Wilson, Leslie (1967)
Third District Vice Councilor—Joseph T. Christmas, Vienna (1967)
Fourth District Councilor—Virgil B. Williams, Griffin (1967)
Fourth District Vice Councilor—Charles T. Cowart, LaGrange (1967)
Georgia Medical Society Councilor—Walter Brown, Savannah (1967)
Georgia Medical Society Vice Councilor—T. A. Peterson, Savannah (1967)
Muscogee County Medical Society Vice Councilor—Roy L. Gibson, Columbus (1965)
Bibb County Medical Society Vice Councilor—Braswell E. Collins, Macon (1966)

Immediate Past President George Dillinger then turned over the gavel to incoming President J. G. McDaniel.

At this time President McDaniel presented Immediate Past President Dillinger with a token of the Association's appreciation for Dr. Dillinger's services as MAG President. Dr. McDaniel gave Immediate Past President Dillinger a bound copy of the *Journal of the Medical Association of Georgia* published during the term of office of former President Dillinger.

Official Attendance Records

The official attendance at the 110th Annual Session of the Medical Association of Georgia held in the Macon Auditorium, Macon, Georgia, May 3-6, 1964, was as follows: MAG members—579; other physicians—18; guests—151; and exhibitors—106; thereby making a grand total of 854 registrants.

There being no further business, President McDaniel adjourned the 110th Annual Session of the Association at 11:40 A.M.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee / March 14, 1964

Received for information: Change in Constitution suggested to the Constitution and Bylaws Board as follows: "Chapter IV," Section 3. Executive Committee. "The Executive Committee between meetings of Council, shall have the authority and power of Council, in the field of legislative activity."

Voted to ask Wayland J. Hayes, M.D., Communicable Disease Center, Atlanta, to represent MAG at the AMA Congress on Environmental Health; letter to Dr. Hayes approved by Dr. Dillinger.

Executive Committee recommended Council approve Commission on Aging/Gerontology Society hearings, ten to be held throughout the state to examine views of aged Georgian population and people concerned with implementation of the programs.

Approved appointment of John H. Pritchett, M.D., Breman, to Joint Council to Improve Health Care of the Aging.

Approved appointment of John S. Atwater, M.D., Atlanta, to Health Advisory Committee to the State Commission on Aging.

Voted to recommend to Council that Mr. Krueger be authorized to employ another Headquarters Secretary.

Received: Definitions of "cancer"—request made from James L. Bentley, Georgia Comptroller General, to draw up a "cancer" policy.

Council / March 14, 1964

Approved: Auditor's Report presented by Dr. Atwater and Mr. Drapalik.

Received for information: Proposed mental health program in Georgia presented by Addison M. Duval, Atlanta.

Presented: Talmadge Hospital Liaison Committee Report by C. H. Richardson, M.D., Sr., Macon.

Voted to empower Executive Committee to act on the matter of redistricting of councilor districts.

Presented: Mr. Krueger presented MAG Mental Health Committee Report in Dr. Brawner's absence.

Approved list of recipients for Certificates of Appreciation.

Approved by Council: State Vocational Training School Program for Medical Secretaries.

Approved by Council: Report of Committee to investigate physician owned repackaging companies.

Approved: Report on the Georgia Hospital-Medical Council on the relationship between hospitals and radiologists.

Voted to select nominees for appointment to a new State Board of Health.

Approved: Appointment of John H. Pritchett, M.D., Breman, and Charles T. Cowart, M.D., LaGrange, to membership on Joint Council for Health Care of the Aged, and Mr. Krueger as ex-officio member.

Received for information: Report on Public Service Board by Linton Bishop, M.D., Atlanta.

Approved by Council: Changes in charters of two medical societies; Jackson-Banks-Barrow will become two separate societies—Jackson-Banks and Barrow on submission of Constitution and Bylaws of new society.

Voted to ask President to appoint fraternal delegates for Alabama Medical Association and Florida Medical Association.

Request by Woman's Auxiliary for a part-time secretary, possibly to be shared with GaMPAC.

Voted to bring before Council the proposal of a dues increase.

MAG Insurance and Economics Board Meeting / April 5, 1964

Recommended that physicians be urged to use standardized health insurance forms in place of unapproved forms sent physicians by certain companies.

Recommended that health insurance authorization form be modified to request only "pertinent data," as often patients are unaware that some information which insurance companies request is unnecessary.

Recommended by Health Insurance Board that employers be urged to continue health insurance coverage for employees after retirement.

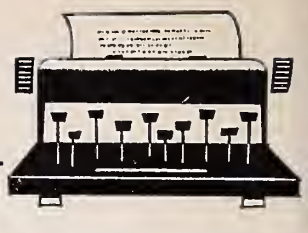
Recommended that MAG membership group insurance plan be discussed with representatives of the present underwriter and another insurance company.

Recommended by Board that each member would draft MAG Specifications for Group Insurance and that at the April 18 meeting, one set would be approved and presented to the two insurance underwriters.

Executive Committee / April 21, 1964

Voted to approve Certificate of Appreciation to Mr. Jack Nelson, *Atlanta Constitution* reporter for his interest and publicity in the field of mental health in the Milledgeville Hospital problem.

EDITORIALS



George Alexander Will Serve As New MAG President-Elect

George Henry Alexander of Forsyth was chosen as the 1964-65 President-Elect of the Medical Association of Georgia at the 110th Annual Session held May 3-6, 1964, at Macon.

Dr. Alexander's father and grandfather were both physicians serving the Forsyth community. He was graduated from Emory Medical School, served his internship at Emory Hospital and has been in general practice in Forsyth since 1925. Active in civic and church affairs in the community, he is Chairman of the Board of Trustees of the Forsyth Methodist Church and is at present Chief of Staff of the Monroe County Hospital.

Dr. Alexander's past experience in organized medicine makes him eminently qualified to hold the Association's highest position. He has served as Secretary and President of the Monroe County Medical Society, as a member of the MAG House of Delegates, and from 1961-63 he was Chairman of the MAG Council. He is a charter member and Past President of the Georgia Academy of General Practice and is active in the American Academy of General Practice, having served as Chairman of the Constitution and Bylaws Committee.

Dr. Alexander is married to the former Miriam Strickland of Concord and they have two children; George L. Alexander is Vice-President of the Atlanta Federal Savings and Loan Association, and their daughter, Mimi, is the wife of Army Captain Harmon F. Cope, Jr., and they are presently stationed at Ft. Sam Houston, Texas.

The Medical Association of Georgia is indeed fortunate to have a man of such ability and dedication to serve as its President-Elect.

Tobacco And Now Alcohol

Now that tobacco has been exposed as potentially harmful to the human organism, another of our social vices has recently come up for more close scrutiny. We have reference to alcohol "in moderation."

Social Drinking

At a recent meeting of the American College of Physicians at Atlantic City, several papers were presented by competent investigators who reopened the question as to whether the average drinker may not be doing himself more harm than has formerly been recognized. Up until fairly recently most investigations have been limited to alcohol addiction while largely ignoring the effects of "social drinking."

The question of intermittent cardiac arrhythmias was brought up for discussion and many apparently feel that alcohol in moderate amounts can be implicated about as frequently as smoking. In some very interesting animal work, alcohol infusion into the hearts of normal dogs over a two hour period in moderate concentration produced striking reduction in cardiac output. How much clinical application can be made from this work is uncertain.

Another investigator concluded that alcohol can produce a fatty liver despite adequate dietary intake, even with choline and methiomine supplements. He had liver biopsies before and after alcohol exposure to support his thesis.

Multiple vitamin depletion in regular drinkers, especially those in the B complex group, was brought up for discussion.

Reappraisal In Order

From the foregoing we may conclude that some re-appraisal could be in order in the near future as to what we mean by drinking in moderation. We may also be forced to alter some of our well-meaning advice to patients past 40 when we gently suggest that a drink or two before dinner will "do you no harm."

While the scientific revelations of the past few years as regards low cholesterol diets, and the tobacco question may to some observers suggest that the millenium for longevity is at hand. On the other side of the coin there are those among us who will view this latest effort to ban the bottle as hitting a new low in man's quest to live in harmony with himself and his environment.

One is moved to wonder if Dr. Strangelove's philosophy, "How I learned to stop worrying and love the bomb," may not have been the outgrowth of such a state of affairs.

1964 Annual Session Highlights

The following report summarizes the activities of the MAG House of Delegates and the General Business Sessions at the 1964 Annual Session at Macon. It is not intended as a detailed account of the proceedings. Rather, it is intended only to accent the many activities and principal actions taken during the 110th Annual Session of MAG. Complete minutes of the Sessions are published in this issue of JMAG.

House of Delegates

The Medical Association of Georgia House of Delegates sessions on May 4 and 6 were well attended by the elected delegates representing the component county medical societies. Keynoting the first session of the House, the Honorable Peter Zack Geer told the delegates that they have his assurance that the State of Georgia will implement the MAA phase of Kerr-Mills as soon as finances are available.

Actions of major interest taken by the House and at the General Business Sessions are listed in brief as follows:

Constitution and Bylaws

The House voted their approval of several changes in the MAG Constitution and Bylaws. Those changes of import are: Made possible the nomination of a second councilor and vice councilor to represent any county society having a membership of 400 or more; made possible the nomination of a third councilor and vice councilor to represent any county society with a membership of 1,000 or more; and, granted to the Executive Committee the power and authority of Council in the field of legislation between meetings of the Council.

The matter of an elected delegate and alternate delegate to the House of Delegates representing the full-time M.D. faculties of the Medical College of Georgia and Emory University Medical School and a like delegate and alternate delegate to represent the State Public Health physicians was turned down by the House on the recommendation of the Reference Committee. In the floor debate on this issue the Reference Committee held to the view that this would fragment rather than solidify the profession. The House sustained the position of the Reference Committee.

GaMPAC

A Council approved resolution endorsing the Georgia Medical Political Action Committee was approved by the House. The resolution read: "WHEREAS, there is a great need for a strong political action committee in Georgia, and, WHEREAS, GaMPAC provides the mechanism through which this desirable objective may be accomplished. NOW, THEREFORE BE IT RESOLVED, that the House of Delegates of the Medical Association of Georgia does hereby go on record as endorsing the Georgia Medical Political Action Committee."

Affiliate Memberships in MAG

The House, in voting approval of a supplemental report of the Council, gave its endorsement to six categories of Affiliate Membership in MAG. These would be: foreign based American medical doctors working as medical missionaries and those engaged in similar education and philanthropic labors; dentists with D.D.S. or D.M.D. degrees who are members of their state and local societies; active members of the Georgia Pharmaceutical Association; D.V.M.s who are members of the Georgia Veterinary Association; teachers of medicine, or of sciences allied to medicine, who prior to this action were not eligible to membership; scientists in fields allied to medicine.

Under the terms of the Reference Committee version of this report, nominations to affiliate membership must be made by component county medical societies and approved by Council prior to the meetings of the House of Delegates. A majority vote of the House would be required to vote affiliate membership to anyone so nominated.

Negro Physician Membership

A supplemental report of Council requesting that all component county medical societies of the Medical Association of Georgia voluntarily admit qualified Negro physicians to their membership was

adopted by the House of Delegates. This supplemental report written in resolution form took note of the fact that "membership in a county medical society is a contributing factor in elevating the quality of the practice of medicine in any community."

Redistricting of Councilor Districts

The House approved an amended version of a supplemental report of Council which requested authority to appoint a redistricting study committee and the power to act on the matter of redistricting following receipt of the recommendations of its study committee. The Reference Committee amended this report to require that Council, after receiving the report of the study committee, present recommendations to the House at a regular or called session.

The House approved a report urging the adoption of pending legislation in the Congress on the subject of tax equality for professional people who have adopted the form of a professional association. Taking note of the damaging amendments to the so-called "Kintner Regulations" presently being considered by the Internal Revenue Service, this report in resolution form urged adoption of H.R. 9217 and S. 2403 which would clarify the tax status of certain professional associations formed under existing state law.

In separate reports the House approved requests for legislation in the field of sterilization and the abuse of children.

In a report submitted by the Sub-Committee on Maternal and Infant Welfare it was recommended that sterilization legislation be submitted to the MAG Council and then to the House of Delegates prior to actual introduction in the General Assembly. The Reference Committee in turn recommended that a draft of a sterilization bill be submitted to the Executive Committee for its approval as soon as possible without submission of such legislation back to the House of Delegates. The House voted its approval of this recommendation.

In approving the report of the Council of MAG the House gave its endorsement of anti-child abuse legislation which would (1) require the mandatory reporting (to proper authorities) of all suspicious child abuse cases not explained by medical history; and, (2) grant immunity from criminal and civil liability to those individuals required by law to make such reports.

In a variety of actions the House of Delegates (1) approved a resolution granting honorary membership in MAG to Herman Jones, Ph.D., Director of the State Crime Laboratory; (2) endorsed a resolution urging the abolition of the office of Coroner and its replacement with the office of medical examiner in each of Georgia's counties; (3) went on record favoring broad insurance coverage for mental illness; (4) approved a special one-day legislative program tailored to meet the needs of medical students; (5) agreed that, when financially feasible, Alternate Delegates to the AMA should be paid actual expenses incurred in attending AMA Delegates meetings; (6) approved a resolution honoring Congressman Carl Vinson for 50 years of dedicated service in the Congress; and, voted to continue to hold MAG Annual Sessions on a rotation basis in the large metropolitan centers in Georgia, provided in the judgment of a site selection committee, that such metropolitan centers have adequate facilities.

Three General Business Sessions were convened in conjunction with the 110th Annual Session. A brief resume of their actions of interest is as follows:

MAG Officers

The following officers will serve during the coming year: President, J. G. McDaniel, Atlanta; President-Elect, George H. Alexander, Forsyth; Immediate Past President, George R. Dillinger, Thomasville; First Vice President, John Kirk Train, Savannah; Second Vice President, Henry S. Jennings, Gainesville; Chairman of Council, Addison W. Simpson, Jr., Washington; Secretary, John T. Mauldin, Atlanta; Treasurer, John S. Atwater, Atlanta; Speaker of the House, J. Frank Walker, Atlanta; Vice Speaker of the House, Joseph B. Mercer, Brunswick.

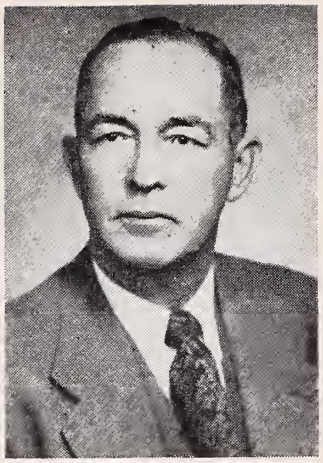
MAG Awards and Certificates

Dr. Joseph D. Applewhite of Macon was named General Practitioner of the Year. Dr. Applewhite, a practicing physician since 1913, has practiced medicine in Macon since 1926.

Certificates of Appreciation were presented to: George R. Dillinger, Thomasville; George H. Alexander, Forsyth; Walker L. Curtis, College Park; Mrs. John E. Porter, Savannah; Peter Hydrick, College Park; Eustace Allen, Atlanta; James N. Brawner, Atlanta; W. L. Pomeroy, Waycross; Miss Dana Hudson, Atlanta; Dr. Hermon Caldwell, Atlanta; Mr. R. L. Siebert, and Mr. Jack Nelson.

Awards for Scientific Exhibits displayed at the Annual Session went to: First Place, "The Mesh Skin Graft" to J. C. Tanner, Jr., M.D., Jacques Vandeput, M.D., and William H. Bradley, B.S., Atlanta; Second Place, "Relief of Pain After Tonsillectomy" to Joel P. Smith, M.D., James T. King, M.D., Nathan I. Gershon, M.D., and William R. Fisher, M.D., Atlanta; Third Place, "Modern Diagnostic Aids in Hearing Disorders" to John S. Turner, Jr., M.D., John H. Per-Lee, M.D., and Julia Williams, M.Ed., Atlanta.

PRESIDENT'S LETTER



J. G. McDaniel, M.D.

MACON MEETING

On Saturday morning, May 2, 1964, Mother Nature had gotten upset about something. I do not know what Father Time had done but she huffed and puffed and wept big tears all the way from Atlanta to Macon, and once or twice she looked at him with such a frigid glare that her tears froze and struck the windshield like acorns falling from an old oak tree.

Change at Macon

This all changed, however, when we arrived at the outskirts of Macon. It could have been that the doctors and their wives had been having some special communication with the good Mother. But most likely, she could have looked down on her children who had worked so hard to make this MAG session a grand success—and mother-like—forgive Father Time, as most wives do, again and again. From that day on she gave us the warmth of her smile.

There was no way that I could attend all the scientific sessions but those that I heard were good —especially Dr. William Boyd. He spoke on the "Geography of Disease." I liked the part where he said that he found the smallest spleen, at autopsy, that he had ever seen. This was at the University of Alabama. It had him puzzled but the medical students immediately diagnosed it as "sickle cell anemia." He said that he looked it up in his book, *Boyd's Pathology,* and sure enough, they were correct. This disease is found, of course, primarily in the Negro race and they have very few Negroes in Canada. Doctors attending other scientific sessions reported uniformly well-written and interesting papers.

Best Seen

The scientific exhibits were the best that I have seen at state meetings. I can understand the dilemma of the judges in awarding first prize.

State Senator James F. Murray, from New Jersey, made one of the most intelligent addresses on politics and government that I have ever heard. He pointed especially to the physicians as being apathetic, fearful of criticism, and primarily just not interested in anything governmental unless it touched them rather intimately.

The alumni banquets were well planned and the food was good. Considerable thought was given to the President's Dinner. It was handled skillfully, and the decorations indicated that loving hands had spent some time there. The entertainment was superb. This really took some doing because the entertainment alone was worth the price of the ticket.

Events of the Day

In the cool of the evening I listened to the ladies as they gathered in little groups and discussed the Auxiliary events of the day. They were particularly impressed with the luncheons. From as much as I could interpret, with all of them talking at the same time, the "luau" luncheon was something that the doctors themselves would have enjoyed—especially that portion which featured the Hawaiian dance by lithe and agile members of the Bibb County Auxiliary as they gracefully undulated and sang the "Little Brown Hut in Hawaii." They loved the doctor's beautiful ante-bellum home where the tea was held. Lovers of flowers and connoisseurs of flower arrangements had a field day. The ladies liked the "Cannon Ball House" of the U.D.C. and the physician's attractive modern home.

Kind to Visitors

Every person we contacted in Macon was unusually kind to us—the attendants at the parking lot, the staff at the hotel, the people in church and the employees at the club. The visiting ladies echoed this many times.

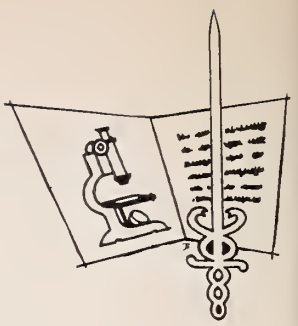
This brings me to the conclusion that the doctors and their wives in Bibb County bask in the sunshine of good will from its citizens and that they all joined hands to make this a good meeting.

And it was!

J G McDaniel

President, Medical Association of Georgia

CANCER PAGE



CANCER OF THE LUNG

William A. Hopkins, M.D., *Atlanta*

RAPID RISE in the incidence of bronchogenic carcinoma over the past 20 years is indeed a very distressing and startling problem. It is now the most common visceral neoplasm in the male. At the present time it accounts for about ten per cent of all autopsies and about 40 per cent of all autopsies for cancer. The startling increase in this disease in recent decades and the extremely poor results accompanying the treatment of this disease should cause the medical profession alarm. A better approach to handling this disease is urgently needed.

Recently Reviewed

To support this premise, we recently reviewed 100 consecutive patients who entered our office with the diagnosis of carcinoma of the lung. Of this group 22 were entirely hopeless at the time we saw them. These 22 were diagnosed in the office by either sputum studies or needle aspiration of obvious metastatic lesion.

The remaining 78 were admitted to the hospital for definitive diagnostic study including bronchoscopy, sputum studies, needle biopsies of visceral lesions where indicated, and scalene node biopsy. We found 39 who presented metastatic disease beyond the hemithorax of the original lesion, therefore rendering them inoperable. Of these patients, 49 were subjected to exploratory thoractomy, and a definitive cancer operation could be performed in only 29 of this group. At the time of surgery, 20 were totally inoperable. Of these 29, five underwent pnuemonectomy and 24 had lobectomy. There was only one operative death in this group, this occurring from lobectomy. It is too early to predict the overall outlook to be expected in this particular group. However, if we should follow the results of other operators, we could expect that only about nine or ten of these will survive five years.

A few years ago it was generally conceded that any lesion in the lung was most likely to be tuberculosis. Unfortunately, this same attitude still exists among many of our physicians. Now, any lesion in the lung must be considered cancer until proven otherwise. Follow-up studies with adequate radiographic examination such as laminography, etc., are a must in the consideration of any peripheral lesion, no matter how small it is. We deplore very vigorously the habit of some clinicians and many radiologists, of suggesting that the lesion be observed for a month, after which time the patient return for a subsequent X-ray. Any shadow undiagnosed on a roentgogram must be worked out and, if the diagnosis is still obscure, then exploratory thoractomy is mandatory.

Hemoptysis must be considered an important and dangerous sign. Most patients with a major bronchus lesion will cough up blood early. Hemoptysis therefore cannot be treated lightly. Complete investigation including bronchoscopy and bronchogram is necessary in each case even in the presence of a negative X-ray. Until this attitude is accepted by clinicians we can never hope to improve the very lamentable statistics that now exist in cancer of the lung.

A Hazard to Health

It is also necessary that doctors in general accept the fact that cigarette smoking is a hazard to human health. Even if they choose not to set an example by discontinuing this habit themselves, they should by all means encourage their patients to do so. Facts are now available and irrevocable, and we can no longer accept the attitude that "because I smoke it is all right for my patients to smoke."

1293 Peachtree Street, N.E.

Approved by the Professional Education Committee, Georgia Division ACS.

MANAGEMENT OF COMPLETE HEART BLOCK

David S. Hubbard, M.D., *Atlanta*

ESTABLISHED ASYMPTOMATIC complete heart block may not require treatment. However, temporary interruption of A-V conduction with prolonged asystole or permanent A-V block frequently causes Stokes-Adams attacks and these may require emergency treatment.

Etiology of the Block

In order to treat complete heart block, it is helpful to know the etiology of the block. In the pediatric age group, congenital anomalies, drug intoxication (particularly Digitalis) or cardiac surgery are the commonly encountered etiological factors. The vast majority of adults with complete A-V block have myocardial infarction due to coronary heart disease. Digitalis intoxication may cause complete heart block, however Stokes-Adams attacks are rarely encountered.

The etiological factor of congenital heart block may not be known; however, frequently a developmental cardiac defect may be responsible. Often these patients are asymptomatic and no treatment may be required.

Directed Treatment

Since the majority of patients with established A-V block are symptomatic, treatment is directed at alleviating or correcting symptoms, since A-V conduction can rarely be re-established, and prevention of Stokes-Adams attacks may be lifesaving.

In the past drug therapy has been directed toward increasing ventricular rate. Atropine, Epinephrine, Ephedrine and Isopropylnorepinephrine (Isuprel) and a number of other drugs including corticosteroids have been used with varying degrees of success. Most have been discharged with the exception of Isuprel which continues to be very useful in the medical management of Stokes-Adams attacks.

Cardiac Pacemakers

In the past ten years the use of electrical cardiac pacemakers has virtually replaced drug therapy and the need for deciding whether Stokes-Adams attacks were precipitated by ventricular asystole, ventricular slowing or ventricular tachycardia. Except during emergency, external cardiac pacemaking has been supplanted by the introduction of the cardiac electrode catheter threaded into an antecubical or external jugular vein. Both unipolar and dipolar catheters are being utilized. Unipolar catheters require direct contact with the right ventricular wall for stimulation. The dipolar catheter tip can be left free in the outflow tract of the right ventricle with satisfactory electrical stimulation, minimizing chances of cardiac perforation.

Pacemaking Requirement

Long term electrical pacemaking by direct electrode implantation in the myocardium requires thoractomy. A self-contained battery is implanted in the abdominal wall; however, wire breakage and battery failure are complications. Recent reports describe a micromodule pacemaker implanted on the epicardium and driven by a small external transmitter.

Not all patients with heart block require artificial pacing; therefore, criteria are being gradually developed for deciding which patients are candidates for long term electrical pacing.

1938 Peachtree Road, N.W.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

THE ROLE OF PSYCHIATRISTS IN COMMUNITY MENTAL HEALTH PROGRAMS

A. S. Yochem, M.D., *Atlanta*

THE PSYCHIATRIST can, and should be, a key leader of improved and corrective health reforms. He can be invaluable in consultation to various local, social, political, church, and school organizations whose stimulation for local improvement needs guidance.

In October, 1952, the American Medical Association sponsored a National Congress on Mental Health. All attending heard again about the multiplicity and diversity of problems in cost, care, and treatment of the mentally ill at a national level. The essence of the meeting was that those in attendance, on returning home, should do something from the *"grass roots." Replace words with action!*

Report Accepted

One result of this meeting was the Steering Committee report to the MAG Council. This report, with recommendations, has been accepted. The Mental Health Committee to the MAG has been reconstructed to include a larger, more representative, enthusiastic leadership and council to the MAG. Secondly, the appointment of Dr. Addison M. Duval, a highly competent psychiatrist, as head of the State Division of Mental Health within the Department of Public Health will provide more organized leadership and planning than has ever been had before in Georgia. His role will become quite difficult, unless local communities can cooperate and be increasingly responsible for caring for their own health needs.

Another Steering Committee recommendation to MAG Council was to get action in the area of mental health insurance coverage. All prepaid health insurance should include mental illness on an equal basis with physical illness. There must be continued effort by the psychiatrists to delineate the many factors involved in emotional disability and treatment.

Further advances in the State have been accomplished at the state hospital and in our medical schools. Psychiatrists must continually pursue and aid in obtaining more personnel in this area. Locally, it is incumbent on all of us to urge sound, intelligent youth to enter medical schools and hopefully receive a good foundation in psychiatry regardless of his eventual specialty. Also, teaching sound, practical psychiatry to our colleagues should be ongoing.

Psychiatrists and local physicians need to get together in pushing the community for local hospital facilities for the care of the mentally ill. The local community hospital should be the central focus around which any health care program should start.

Care of the Indigent

The care of the indigent is a big problem. Certainly the demands for service and treatment of nonpay patients far exceeds the time or capabilities of a private psychiatrist. Psychiatrists do give time and service in treating some indigent people, but it does not fulfill the great need. Even if more people are covered by insurance, and more psychiatrists are able to see indigent people—there will be great numbers still untreated.

Finally, the matter of sound financial support for a mental health program is a necessity. Many foresee magic in words and planning, but each community needs to start its own campaign for funds—whether they are local taxes, donations, grants, or foundations. Do anything you can to get it as locally supported as possible, so that the state or federal government isn't compelled to give more and more help to the mentally ill citizens of Georgia. The state is willing to give guidance and aid in supplying personnel but would rather not be forced to treat or to set fees.

490 Peachtree Street, N.E.

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

DEATHS

A. M. COLLINSWORTH, 59, an Atlanta physician who was noted for his work in the prevention and treatment of injuries among industrial workers, died April 25, 1964.

Dr. Collinsworth was a graduate of Mercer University and the Medical College of Georgia and in 1935 he entered practice in Atlanta. He was a member of the Fulton County Medical Society, the Medical Association of Georgia, the American Medical Association, the International College of Surgeons and the Industrial Medical Association of which he had been a member of the national board of directors and Chairman of the southeastern states regional committee. He was a member of St. Luke's Episcopal Church.

Survivors include his widow, the former Janice Fuquay; a brother, Dr. P. L. Collinsworth of Avondale Estates; and nieces and nephews.

Atlanta physician, F. CORTEZ MIMS, died April 22, 1964, in a private hospital.

Dr. Mims was a native of Ocilla and attended the University of Georgia and Mercer University. He was graduated from the Emory University School of Medicine in 1925 and entered private practice in 1926.

He was a member of the Glenn Memorial Methodist Church, the American Medical Association, the Medical Association of Georgia and the Fulton County Medical Society. He was a past master of the Morningside Masonic Lodge 295 and a past president of the Atlanta Masonic Club.

Dr. Mims is survived by his wife, the former Eula Crapps; three sisters, Mrs. John Luke, Wray, Georgia; Mrs. Dan Hill, Nashville, Georgia, and Mrs. R. T. Usry, Villa Rica, and a brother, P. T. Mims, Moultrie.

GEORGE WILLIAM SMITH, who with his wife and mother, was killed April 18, 1964, in a private plane crash in Lubbock, Texas, will be honored with a memorial tribute by the Medical College of Georgia at Augusta where Dr. Smith was a member of the medical college faculty. The victims had been en route from Augusta to Los Angeles for a meeting of the Harvey Cushing Society, a national professional society of neurosurgeons.

Dr. Smith came to Augusta as an Associate Professor of Neurosurgery in 1956 and was later made a full professor and promoted to Chief of Neurosurgery at the medical college.

Five children survive their parents, Milton Terry Smith, 18, a freshman at Northwestern University, Sara Bridget Smith, 15, and Doris Jane Smith, 14, students at Tubman Junior High School, also Holly Ann Smith, 12, and Cathleen Clare Smith, 9, students at Monte Sano Elementary school.

CHARLES NEWTON WASDEN, 61, Macon surgeon died unexpectedly March 31, 1964.

He was graduated from Mercer University in 1923 and from the Medical College of Georgia in 1926 and began the practice of medicine in Macon in 1930.

Dr. Wasden was a Fellow of the American College of Surgeons, a member of Excelsior Surgical Club, the Elks Club, Idle Hour Country Club and a former member of the Kiwanis Club, a member of Kappa Sigma fraternity and Phi Rho Sigma Medical fraternity. He was surgeon for the Southern Railroad and former chief-of-staff of the Macon Hospital.

During World War II, serving from 1942 to 1945, Dr. Wasden was chief of surgical staff of the 15th Evacuation Hospital, European Theater, attached to the 2nd Corps in North Africa, later to Patton's Army in Sicily and Gen. Mark Clark's 5th Army in Italy. He was lieutenant colonel at the time of his discharge and was awarded the Bronze Star for outstanding service rendered on Anzio Beachhead.

His survivors include Mrs. Wasden; two daughters, Mrs. William F. Bailey, Jr., of Atlanta, and Mrs. Bert D. Schwartz of Macon; five grandchildren; two brothers, W. T. Wasden of Millen and Dr. Harry Wasden of Quitman, and a number of nieces and nephews.

SOCIETIES

ELBERT-FRANKLIN-HART MEDICAL SOCIETY met April 1 in Carnesville. Hal Murry, M.D., urologist from Anderson, South Carolina, was the guest speaker and chose as his topic "Kidney Infections."

The NINTH DISTRICT MEDICAL SOCIETY met April 15 in Gainesville prior to the medical seminar sponsored by the society and the Georgia Academy of General Practice. A luncheon was held for the members and their wives and Felix P. Heald, Jr., M.D., Director of the Adolescent Unit of the Children's Hospital, Washington, D.C., spoke on "The Psychology of Adolescence."

The SIXTH DISTRICT MEDICAL SOCIETY voted at its April 22 meeting to organize and incorporate a Middle Georgia Medical Society. On motion, the group voted to have a three-member committee investigate the idea. Serving as guest speaker for this meeting was Arthur L. Humphries, Jr., M.D., Assistant Professor of the Department of Surgery at the Medical College of Georgia, Augusta. Dr. Humphries spoke on "Transplantation of Kidneys and the Renal Transplantation Today and Tomorrow."

THIRD DISTRICT MEDICAL SOCIETY met April 16 in Columbus. A Medical Science Day included the following on the program: Walker Harris, M.D., Columbus, "Recent Advances in Diagnostic Radiology;" Major Joseph H. Zoll, MC, Martin Army Hospital, "Orthopaedic Aspects of Airborne Training;" Brian H. McCracken, M.D., Tulane University School of Medicine, "Renal Transplants;" and R. M. Shuffstall,

M.D., Columbus, "Clinico Pathological Conference — A Case of Jaundice." After dinner C. C. Butler, M.D. of Columbus gave an illustrated talk on "An African Safari." The social hour preceding dinner was hosted by the MUSCOGEE COUNTY MEDICAL SOCIETY.

PERSONALS

Six Georgia physicians have been honored by the American College of Physicians—an international organization representing specialists in internal medicine and related fields.

Elected as Fellows were: WYMAN P. SLOAN, JR., of Atlanta; CURTIS H. CARTER and B. SHANNON GALLAHER of Augusta, and LEWIS E. JONES, of Dublin.

Elected as Associates were: FREDERICK W. DOWDA, and JOSEPH A. WILBUR, of Atlanta, and BEN B. OKEL, Decatur.

Hall County's physicians have been on the go this year—going to conferences and clinics in connection with their professional specialties.

Here is a list of conferences—past and upcoming—that medical society members have attended or are planning to attend:

ROBERT H. ANDERSON, JR., Southeastern Surgical Conference, New Orleans, La., March 16-19.

RAFE BANKS, JR., Southeastern Urological Association Meeting, April 12-16, Clearwater, Fla.

P. F. BROWN, JR., Southeastern Surgical Congress aboard ship USS Hansiatic, March. Discussed transhepatic cholangiography, Atlanta, February.

A. FREDERICK BLOODWORTH, Oschner Clinic Foundation, April 16-18, New Orleans, La. (Post-Graduate Seminar on Internal Medicine).

JOHN H. REED Seminar on Ophthalmology, University of Florida, January 24-30.

W. D. STRIBLING, Five days of Internal Medicine by American College of Physicians, Charity Hospital, New Orleans, La., January.

C. J. WALKER, Atlanta Graduate Medical Assembly, March.

WILLIAM H. WHITE, JR., American College of Obstetrics and Gynecology, Florida, May.

C. W. WHITWORTH, New Orleans Academy of Ophthalmology, New Orleans, La., February 15-22.

H. E. VALENTINE, Topics in Clinical Medicine at Johns Hopkins Hospital, Baltimore, Md., May 18-23.

JAMES R. BURNS, Critical Challenges and Clinical Emergencies, Atlanta, January 23.

JOHN K. BURNS, Medical Association of Georgia, Macon, Georgia, May.

P. K. DIXON, American College of Surgeons, San Francisco, California, June.

BEN P. GILBERT, Graduate Medical Assembly, Atlanta, February 22. Third Annual Post-Graduate Course, sponsored by Emory University Hospital, Department of Pediatrics at Grady Hospital, Atlanta, March 23.

HENRY S. JENNINGS, Internal Medicine, Johns Hopkins Hospital, Baltimore, Md., May 18-23.

A. C. JOHNSON, Cardiology, Medicine, Conference of Georgia, February.

JAY R. JOHNSON, American Urological Meeting, May 11-14, Pittsburgh, Pa.

DANIEL R. LUKE, Greenville Post Graduate Seminar, Greenville, South Carolina, April 14-16.

HAMIL MURRAY, Spring Seminar of College of American Pathologists Gulf Region, Atlanta, Ga., April 1964, Atlanta Society of Pathologists, Atlanta.

WILLIAM C. McCARVER, Medical Emergencies, Atlanta, March.

W. BEN NALLEY, American Society of Obstetricians and Gynecologists American Society for Study of Sterility, Miami, Fla., May.

HARVEY NEWMAN, Third Annual Post-Graduate Course, Atlanta, Georgia, sponsored by Department of Pediatrics, Emory University Hospital, March 23-25.

LOWELL PEACOCK, Third Annual Post-Graduate Course, sponsored by Department of Pediatrics of Emory University Hospital, March 23-25.

SAMUEL O. POOLE, "Neurology for the Internist," Mayo Clinic, Rochester, Minnesota, March 2-3.

First District

No news submitted.

Second District

No news submitted.

Third District

WAYNE BOHANNON, a native of Dodge County, will locate in Vienna July 1, 1964, and will be associated with J. T. CHRISTMAS at his clinic offices.

C. P. SAVAGE, Mayor of Montezuma, was elected a Director of the Georgia Municipal Association at a business meeting of the group held in Perry, April 2, 1964.

The Association of County Commissioners of Georgia, meeting at Jekyll Island in April, have publicly commended LORAN WILLIAMS, Cordele, for 42 years of dedicated service as a County Commissioner.

Fourth District

TOM F. LOWRY, DeKalb County, attended a seminar on "Cardiac Symptoms" at the Medical College of Georgia in January.

A seminar on "Recent Advances in Metabolic Diseases," at Mt. Sinai Hospital, New York, was attended by BEN B. OKEL, Decatur, in February.

ROBERT M. FINE, Decatur, in April attended the Southeastern Dermatological meeting in Richmond, Virginia.

Dr. and Mrs. T. A. SAPPINGTON, Thomaston, recently attended the American Academy of General Practice meeting held in Atlantic City, New Jersey.

WILLIAM PHELPS ELLIS, 84, of Pine Mountain, retired in April after 58 years in the medical profession.

Fifth District

BRUCE LOGUE recently served as Professor protem at the Good Samaritan and St. Mary's Hospitals, West Palm Beach, Florida. He gave a talk to the Heart Seminar of the West Palm Beach Heart Association entitled "Clues on the Patient with Cardiovascular Disease."

J. FRANK WALKER, Atlanta, has been reappointed a member of the Council on Legislative Activities of the American Medical Association.

RICHARD BLUMBERG of Atlanta, Chairman of the Emory University Pediatric Department, was recently elected President of the Georgia Pediatric Society. He succeeds WILLIAM A. WILKES of Augusta. Other newly elected officers include MARTIN H. SMITH, Gainesville, President-Elect; PRESTON ELLINGTON, Augusta, Vice-President; and LEROY ANTROBUS, Atlanta, Secretary-Treasurer.

Atlantan, ARTHUR J. MERRILL has been reappointed a member of the Council on Drugs of the American Medical Association.

J. WILLIS HURST, Atlanta, participated in the program of the annual meeting of the Heart Association of Alabama, March 4-5, 1964.

LEON I. GOLDBERG, Atlanta, also attended the Alabama Heart Association meeting in Birmingham where he presented a paper on "Cardiovascular Drugs." March 7, 1964, he presented a paper on cardiovascular toxicity during the Conference on Evaluation and Mechanisms of Drug Toxicity at the New York Academy of Sciences.

Recently attending a meeting in Dallas, Texas, of the Society for Gynecologic Investigation was JOSEPH SWARTWOUT of Atlanta.

JOHN D. THOMPSON, Atlanta, attended the meeting of the Association of Professors of Gynecology and Obstetrics in Chicago, March 21-22, 1964.

Two Sandersville physicians have retired in recent months. In March, NICHOLAS OVERBY, who came to Sandersville in 1923 to join the staff of the late Dr. William Rawling's Sanitarium, retired after over 51 years of service in the practice of medicine. In April, O. D. LENNARD retired after 35 years of medical practice. His retirement, due to illness, was on the advice of his physician.

Sixth District

No news submitted.

Seventh District

No news submitted.

Eighth District

T. H. CLARK, retired, senior member of the medical profession in Coffee County, was saluted at the annual Doctor's Day dinner held March 30 in Douglas. E. D. BELL, on behalf of the Coffee County Medical Society, paid tribute to Dr. Clark in review of his years of service to the community.

Ninth District

BRUCE SHAEFER, Toccoa, was recently elected Third Vice-President of the Association of County Commissioners at their recent meeting held at Jekyll Island in April.

88-year-old Clayton physician, J. C. DOVER, was recently presented a bronze plaque by the Rabun County medical staff in recognition of his services to the Clayton-Rabun area and the medical profession. JOHN E. FOWLER made the presentation.

Tenth District

No news submitted.

1964 CALENDAR OF MEETINGS

State

August 9-14—Annual Southeastern School of Alcohol Studies, Center for Continuing Education, University of Georgia, Athens. Contact: *Charles B. Methvin, 1260 Briarcliff Rd., N.E., Atlanta, Ga. 30306.*

September 20-21—Scientific Sessions of the Georgia Heart Association, Augusta Town House, Augusta.

May 2-5, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

June 18-20—11th Annual Mountain Top Medical Assembly, Waynesville, N. C.

August 8—Medical Scientific Seminar (Second Muscle Shoals Medical Assembly) sponsored by the Muscle Shoals Chapter of the Alabama Academy of General Practice, Turtle Point Yacht and Country Club, Florence, Ala.

August 20-22—Seventeenth Annual Postgraduate Obstetric-Pediatric Seminar, Daytona Plaza Hotel, Daytona Beach, Fla.

August 20-22—West Virginia State Medical Association, Greenbrier Hotel, White Sulphur Springs, W. Va.

August 24-27—Fourth Inter-American Conference on Toxicology and Occupational Medicine, sponsored by the University of Miami School of Medicine with the cooperation of the University of Puerto Rico School of Medicine, Fountainebleau Hotel, Miami Beach, Fla.

August 25-28—American Association of Blood Banks, Shoreham Hotel, Washington, D.C.

September 10-12—American Association of Obstetricians and Gynecologists (members and invited guests), The Homestead, Hot Springs, Va.

September 16-18—American Association of Medical Clinics, Americana Hotel, Bal Harbour, Fla.

September 24-26—Dixie Postgraduate Assembly, Dauphin Island (Mobile) Ala.

September 25-26—American College of Obstetricians and Gynecologists, (District 7), Dinkler-Tutwiler Hotel, Birmingham, Ala.

September 26-27—Congress on Occupational Health, Rice Hotel, Houston, Tex.

September 28-29—Tennessee Valley Medical Assembly, Tivoli Theatre, Chattanooga, Tenn.

National

September 15, 1963-June 15, 1964—Nine month tutorial program in Cardiology offered by the Institute for CardioPulmonary Diseases, Scripps Clinic and Research Foundation, La. Jolla, Calif.

June 21-25—American Medical Association Annual Meeting, San Francisco, Calif.

June 26 - July 1—Second Hawaii Medical Seminar, Princess Kaiulani Hotel, Honolulu, Hawaii.

August 24-27—Annual Meeting of the American Academy of Physical Medicine and Rehabilitation, Statler-Hilton Hotel, Boston, Mass.

WHEN YOU TELL, BE SURE TO SELL

One thing that a physician, all physicians, can do is "sell" modern medical care. By sell, I mean, making the public aware of how inexpensive is the type of care they are getting. The fundamental proposition is that today's medical care was not available 20 or 12 years ago. Antibiotics, cobalt, cortisone, or heart surgery were not to be had.

The long economic drain of tuberculosis has been dramatically reduced by early detection and antibiotics and chemotherapy. "Polio" is rapidly becoming non-existent. Surgery for thyrotoxicosis is at a minimum. The death rate, complications, and long recovery period from pneumonia are near eradication.

Only 40 years ago, one in every four patients who were subject to a major operation died. Now one in every 100 dies and many operations are performed that were impossible ten years ago. The heart lung machine makes possible delicate heart operations. Thousands of people formerly died from a ruptured appendix. These people recover today. Today, one out of every three cancer patients survive, whereas, in 1931 only one out of seven survived. New drugs, new vaccines, and new techniques have developed so rapidly —80 per cent of those now used were not known ten years ago.

The average prescription cost today is $3.91. In 1939, it was 91¢ but today's drugs couldn't be bought in 1939. The average wage earner works 18 minutes less today to buy these drugs. The length of time a person is ill or hospitalized is much less, so the cost of being ill or for hospitalization is often much less—an important economic factor.

While the total cost of health care has risen rapidly, the cost of physicians services has not. Hospital costs have increased the most but of the average hospital bill 70 per cent is for labor. Labor costs in hospitals have increased 520 per cent since 1946. According to the Bureau of Labor Statistics, physician fees went up 95 per cent from 1940 to 1960; food 150 per cent, shoes 175 per cent, and men's haircuts jumped 233 per cent. Per capita incomes rose nearly 200 per cent more than doctor's fees.

The caliber of medical education in the United States is so high in quality that nearly 9,000 foreign students are now studying medicine in this country.

In the first 13 years of socialized medicine in England that country built only one new hospital while the United States has built 763. In those years America has produced ten Nobel prize winners in medicine, while England has had four. It used to be about equal.

This is part of the Story of American Medicine, that money couldn't buy 20 or 12 years ago. This is the part of the story physicians must tell.

Reprinted from the "President's Page of the Journal of The Michigan State Hospital Society, 62: 1048, 1963.

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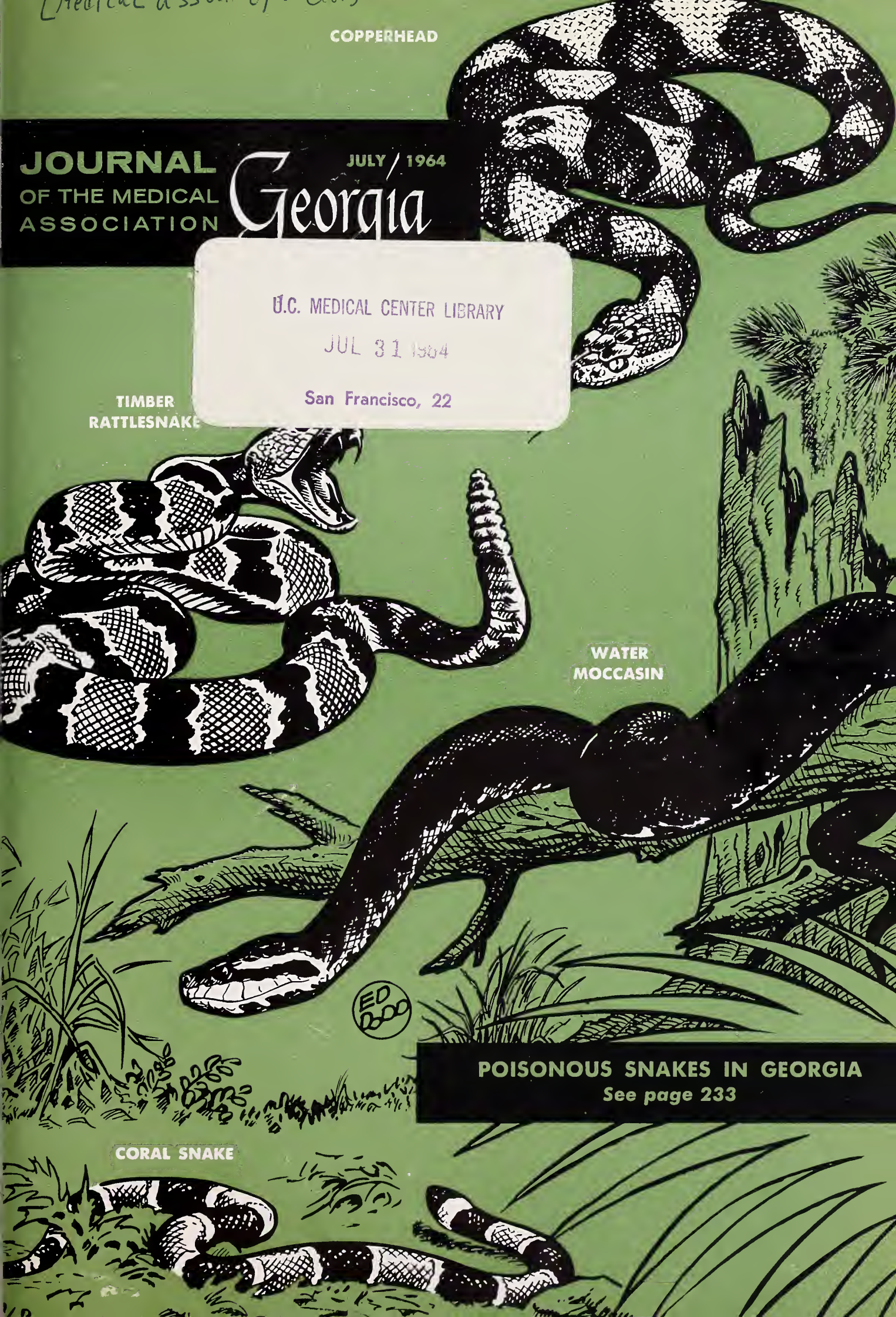
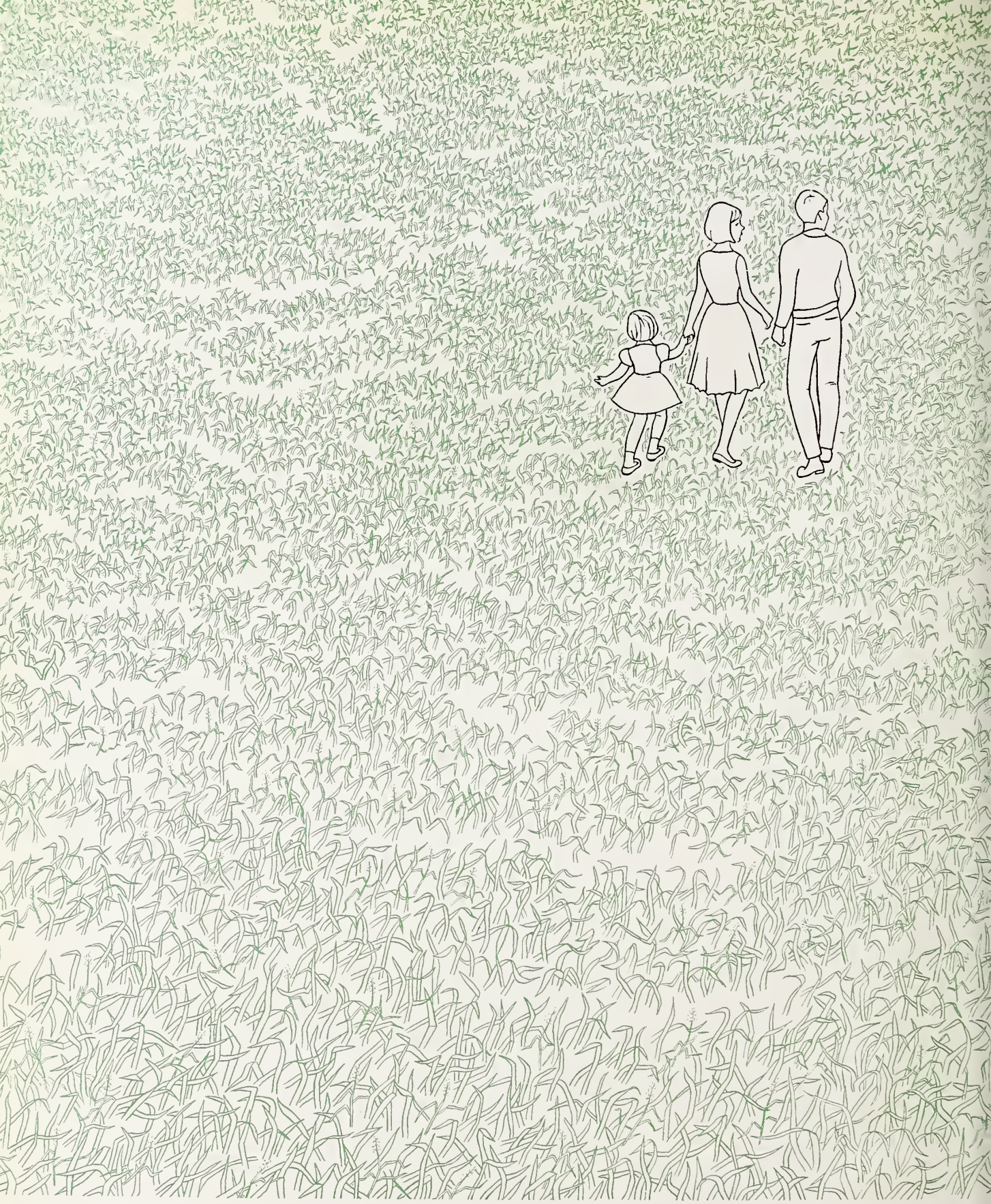


POISONOUS SNAKES IN GEORGIA

See page 233



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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

ON POISONOUS SNAKEBITES IN GEORGIA

Henry M. Parrish, M.D.
Louis P. Donovan, M.S.
Columbia, Missouri

■ ***With the rise in popularity of camping, this paper points up a hazard which men are prone to minimize.***

GEORGIA has the second highest snakebite death rate in the United States. The highest average snakebite death rates per 1,000,000 population were found in Arizona (0.63), Georgia (0.60), Florida (0.54), Alabama (0.45), South Carolina (0.31), and Texas (0.27).[1] From 1950 through 1959 there were 22 fatalities resulting from poisonous snakebites in Georgia. Very little is known about how many people are bitten by poisonous snakebites every year in Georgia. The purpose of this study is to describe the epidemiological characteristics of poisonous snakebites in Georgia, to relate some medical findings associated with these bites, and to review briefly current concepts of snakebite treatment.

Poisonous Snakes

According to Conant,[2] the following species and sub-species of poisonous snakes are indigenous to Georgia: the eastern diamondback rattlesnake *(Crotalus adamanteus)*, the timber rattlesnake *(Crotalus horridus horridus)*, the canebrake rattlesnake *(Crotalus horridus atricaudatus)*, the Carolina pigmy rattlesnake *(Sistrurus miliarius miliarius)*, the dusky pigmy rattlesnake *(Sistrurus miliarius barbouri)*, the northern copperhead *(Agkistrodon contortrix mokeson)*, the southern copperhead *(Agkistrodon contortrix contortrix)*, the eastern cottonmouth moccasin *(Agkistrodon piscivorus piscivorus)*, and the eastern coral snake *(Micrurus fulvius fulvius)*. Thus, there are nine species or sub-species of poisonous snakes in Georgia.

Georgia has each of the four major kinds of venomous snakes found in the United States. With the exception of the coral snake, they are all pit vipers. They are so named because of a characteristic pit which is located between the eye and nostril on each side of the body. Pit vipers also are identified by elliptical pupils and by two well-developed fangs which protrude from the maxillae when the snake's mouth is opened. Rattlesnakes have rattles which are attached to their tails. Copperheads, cottonmouth moccasins and harmless snakes do not have rattles. The copperhead has a reddish-brown head and dark, hourglass-shaped crossbands on the body. Harmless snakes do not have facial pits, they have round rather than elliptical pupils, and while they have teeth, they lack fangs.

The coral snake is a beautifully colored small snake which has broad rings of scarlet and black separated by narrow rings of yellow. An easy way to remember this is, "red next to yellow will kill a fellow." It is important to remember that the coral snake's *snout is always black*. Several harmless snakes resemble coral snakes but their snouts are usually grey or red. Coral snakes have round pupils and they lack facial pits. See the following figures for photographs of poisonous snakes of Georgia.

Methods of Study

A questionnaire and letter explaining the purpose of this study were mailed to a "selected" group of Georgia hospitals listed in "Hospitals Guide Issue," *Journal of the American Hospital Association*. The hospitals selected for this study were general hospitals, children's hospitals and college infirmaries. Army, Navy, Coast Guard, Public Health Service, Air Force and Veterans Administration hospitals also were sent questionnaries. Maternity, tuberculosis and mental hospitals were omitted as they

From the Department of Community Health and Medical Practice, School of Medicine, University of Missouri, Columbia, Missouri.

This investigation was supported in part by Public Health Service Research Grant GM 11268-02 from the Division of General Medical Sciences, Public Health Service.

would not be expected to treat snakebite victims. A total of 131 Georgia hospitals comprise the study group. Each hospital was requested to report all in-patients admitted to the hospital for snakebite treatment during 1958 and 1959.

Most hospitals do not code and tabulate the diagnoses of emergency room and out-patient clinic visits. Since some snakebite victims are not admitted to the hospital as in-patients, it seemed essential to ask a sample of practicing physicians how many snakebite victims they treated on both an out-patient (office, home, emergency room, etc.) and on an in-patient basis. Previous surveys,[3-4] have shown that most people with venomous snakebites are treated by general practitioners, surgeons, internists, pediatricians, and orthopedic surgeons. Therefore, a random sample of one-third of all the Georgia physicians in these categories of practice who were listed in the A.M.A. American Medical Directory were sent questionnaires.

Death certificates for fatal snakebite cases were obtained from the Georgia Department of Public Health.

Results

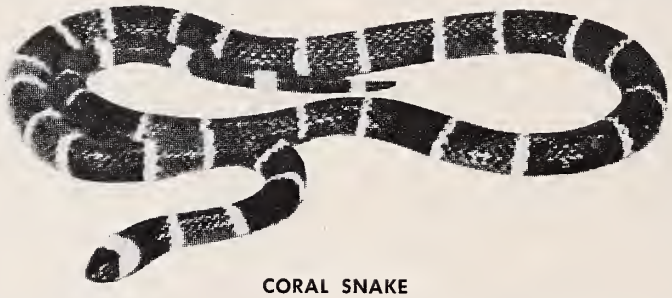
This report is based on questionnaires returned by 112 (85 per cent) of 131 Georgia hospitals. It is supplemented by questionnaires returned by 642 (74 per cent) of 870 practicing physicians in the State and by four snakebite death certificates provided by the Georgia Department of Public Health.

Incidence—Georgia hospitals reported a total of 151 in-patients treated for poisonous snakebites during 1958 and 1959. There were 71 cases in 1958 and 80 cases in 1959—an average of 75.5 cases per year. Of the 151 snakebites reported during 1958 and 1959, detailed case reports were received for 126 patients and only numbers of bites were reported for 25 cases. *All of the analyses in this paper, excluding the estimate of incidence, were based on the 126 detailed case reports received from hospitals.*

Physicians' reports, when adjusted to account for all Georgia physicians in the practice categories mentioned, indicated that approximately 304 in-patients and 226 out-patients were treated for snakebite accidents each year. The difference between the estimate of 304 in-patients treated by physicians and the average of 75.5 in-patients reported by hospitals can be explained, in part, by the following facts: (1) nineteen (15 per cent) of the Georgia hospitals did not participate in the study; (2) thirty-four counties from which physicians reported snakebites did not have hospitals listed in the "Hospital Guide Issue"; and (3) there was evidence of under reporting snakebite in-patients from ten hospitals which participated in the study.

Physicians in counties from which hospital in-patient case reports were received estimated that 156 in-patients and 78 out-patients were treated for snakebites each year. Their estimate of 156 in-patients treated was somewhat higher than the average of 75 in-patients hospitals reported treated. However, there was evidence of under reporting bites from *at least* ten of these hospitals.

Hospitals from counties which did not have a hospital listed in "Hospital Guide Issue" reported treating 69 in-patients and 81 out-patients for snakebites in small clinics, infirmaries and hospitals. Most of these counties had less than 10,000 residents.



CORAL SNAKE

Physicians also reported treating 69 in-patients and 81 out-patients in several counties from which hospitals listed in "Hospitals Guide Issue" reported no bites treated. These cases include those from counties in which 19 hospitals did not participate in the study.

Taking all of these various reports into consideration, we estimate that approximately 530 (304 in-patients and 226 out-patients) people were treated annually for poisonous snakebites in Georgia. This provides an incidence of 13.44 bites per 100,000 population per year.

Geopathology—The geographical distribution of snakebites reported in Georgia during 1958 and 1959 may be seen in Figure 1. The lightly shaded counties are those from which hospitals reported in-patients treated for snakebites. An appropriate symbol is used to mark each hospitalized patient who was bitten by a specific kind of snake. The darker shaded counties are those counties from which physicians reported snakebite cases, but from which no cases were reported by hospitals.

Of 126 people hospitalized for snakebite treatment for whom detailed records were available, 45 (36

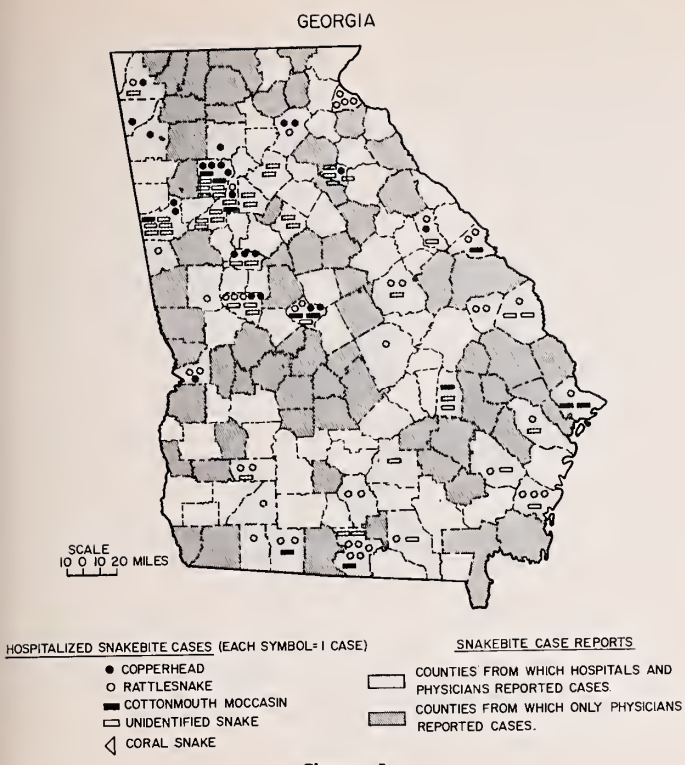


Figure 1

per cent) were bitten by rattlesnakes, 23 (18 per cent) by copperheads, 12 (ten per cent) by cottonmouth moccasins, and 46 (36 per cent) by unidentified poisonous snakes. There were no coral snake bites reported. Five of the rattlesnakes inflicting bites were identified as pigmy rattlesnakes.

Figure 1 shows that most of the copperhead bites occurred in the northwestern and northcentral parts of the state. However, the range for copperheads is the entire state except for the southeastern corner adjoining Florida. Cottonmouth moccasin bites happened throughout Georgia except for the extreme northern part of the state. This pattern of bites fits the cottonmouth range for Georgia described by Conant.[2] While rattlesnake bites were reported from all parts of the state, by far the largest number of rattlesnake bites occurred in the southern and eastern parts of Georgia.

There does not appear to be any single area in Georgia where most snakebite accidents happen. There was a fairly even distribution by counties where snakebites occurred. The Greater Atlanta area, which includes parts of Fulton, DeKalb, and Cobb counties is the location of many snakebite accidents.

Temporal Relationships—The monthly distribution of snakebite accidents is shown in Table I. Snakebites were infrequent during the colder months of the year — December, January, February and March. In general, snakes are usually inactive and/or hibernating during the colder months. The bite in January took place when a pulp mill worker disturbed a rattlesnake beneath some old logs. Most snakebites in Georgia occurred from April through October when 122 (97 per cent) of the 126 bites were inflicted. This striking seasonal distribution of bites coincides with the time that snakes are most abundant and active and with the time that people have greater exposure due to out-of-doors occupations and recreation. Similar "seasonal epidemics" of venomous snakebites have been observed in New England, and Florida.[3,4]

There were two peak times throughout the day when snakebites were especially frequent: the three hour period from 9:00-11:59 a.m. when 33 bites happened and the six hour period from 3:00-8:59 p.m. when 55 bites were inflicted. The number of bites by three hour periods of time were: 6:00-8:59 a.m. 11 bites; 9:00-11:59 a.m., 33 bites; 12:00 noon-2:59 p.m., 16 bites; 3:00-5:59 p.m., 27 bites; 6:00-8:59 p.m., 28 bites; 9:00-11:59 p.m., eight bites; and 12:00 midnight-2:59 a.m., one bite. There were no snakebites from 3:00-5:59 a.m. The one bite after midnight involved a soldier on a field training exercise who was bitten by a rattlesnake. In two cases the time of the bite was not stated.

Bite Victims—There were 72 white males, 26 white females, 21 non-white males and 7 non-white females admitted to Georgia hospitals for snakebite treatment during 1958 and 1959. All of the non-whites were Negroes, with the exception of one American Indian male. Using the 1960 census of the population of Georgia, the bite rates per 100,000 population were: 5.17 for white males, 3.93 for non-white males, 1.82 for white females and 1.18 for non-white females. Thus, whites had higher snakebite rates than non-whites and males had higher rates than females.

The age distribution of Georgia snakebite victims is shown in Table II. The largest number of bites happened to children and youths ten-19 years of age (42 bites) and those 0-nine years of age (31 bites). Indeed 58 per cent of all snakebites were inflicted on children and young adults less than 20 years of age. Age-specific bite rates are much more meaningful since they take into account the population at risk in a particular age group. The highest biannual bite rates per 100,000 population were: ten-19 years of age (5.65) and 0-nine years of age (3.40). The lowest bite rates were found among people 60-69 years of age and those 70 or more years of age.

An analysis of the occupations of the patients

TABLE I
SEASONAL DISTRIBUTION OF VENOMOUS SNAKEBITES IN GEORGIA, 1958 AND 1959

Month	No. Bites	Month	No. Bites
January	1	July	33
February	0	August	24
March	0	September	21
April	7	October	6
May	12	November	3
June	19	December	0

TABLE II
AGE DISTRIBUTION OF HOSPITALIZED SNAKEBITE VICTIMS IN GEORGA, 1958 AND 1959

Age Group (years)	Population at Risk*	No. Bites	Rate Per 100,000**
0 - 9	912,099	31	3.40
10 - 19	743,204	42	5.65
20 - 29	522,981	10	1.91
30 - 39	516,414	16	3.10
40 - 49	474,378	15	3.16
50 - 59	357,711	7	1.96
60 - 69	238,812	4	1.67
70 or more	177,517	1	0.56

*Based on the 1960 Census of the Population of Georgia.
**These rates are only on hospitalized patients for whom information was available.

showed that 64 were children, 20 were farmers or farm laborers, 12 were housewives, 11 were laborers other than farm laborers, five were craftsmen, three were unemployed, and two were private household workers. Also, there was one victim in each of the following occupational categories—professional, clerical, and sales worker. The occupation was not coded for the remaining bite victims.

Activity and Place—Twenty-two bites occurred while children were playing outside, 14 in their own yards and eight elsewhere. Nineteen bites happened while people were working on farms. An additional nine people were bitten while working or walking in their yards. Five people were bitten while handling a poisonous snake, five while picking up logs or lumber, four while engaged in recreation other than hunting and fishing, three while hunting or fishing, two while working near a hen house, two while walking on or near a highway, two while reaching into an obscure place and two while participating in Army maneuvers. The activity when bitten was not coded for the remaining patients.

The place where the bite accident happened is closely related to the activity when bitten. The largest number of snakebites, 23, happened right in the patient's own yard. Sixteen people were bitten on a farm not near the house, nine in the woods, eight near a lake, river or water, six in a field near the house, four in a field away from the house, three in or under a building or house, two near a chicken house, and two on or near a highway. Of the three people bitten in or under a house, one was bitten under the house, one was bitten in his garage, and one child was bitten while inside his own home. The place where the bite took place was not coded for the remaining patients.

Site and Severity—The anatomical sites on human beings where venomous snakes inflicted their bites are shown in Table III. Ninety-seven per cent of the bites were on the extremities—29 per cent on the upper extremities and 68 per cent on the lower extremities. The fingers and hands were the parts most often bitten on the upper extremities. The feet and lower legs, including the ankles, were the parts most frequently bitten on the lower extremities. One child was bitten on the right lateral side of his abdomen by an unidentified poisonous snake while swimming. The site of the bite was not recorded for three patients.

A modification of the clinical classification of pit viper venenations by Wood, Hoback and Green[5] was used to determine the severity of bites. Bites were classified as follows:

Grade O—*No venenation.* Fang or tooth marks, minimal pain, less than one inch of surrounding edema and erythema. No systemic involvement.

Grade I—*Minimal venenation.* Fang or tooth marks, severe pain, one-five inches of surrounding edema and erythema in first 12 hours after bite. No systemic involvement usually present.

Grade II—*Moderate venenation.* Fang or tooth marks, severe pain, six-12 inches of surrounding edema and erythema in first 12 hours after bite, systemic involvement may be present—nausea, vomiting, giddiness, shock or neurotoxic symptoms.

Grade III—*Severe venenation.* Fang or tooth marks, severe pain, more than 12 inches of surrounding edema and erythema in first 12 hours after bite, systemic involvement usually present as in Grade II.

The severity of venenation (venom poisoning) was classified as follows for the 126 hospitalized cases: 27 (21 per cent) were Grade O; 44 (35 per cent) were Grade I; 28 (22 per cent) were Grade II; 20 (16 per cent) were Grade III; and in seven (six per cent) cases the severity of venenation was not stated. There were four deaths among the 126 hospitalized cases in this series, providing a case-fatality rate of 3.2 per cent. However, the case-fatality rate for the estimated number of in-patients and out-patients treated in the state probably is less than one per cent. This is confirmed by the fact that during the ten-year period, 1950-1959, there was an average of only 2.2 snakebite deaths per year.[1]

TABLE III
ANATOMICAL SITES OF BITES INFLICTED BY VENOMOUS SNAKES IN GEORGIA, 1958 AND 1959

Anatomical Site of Bite	Side of Body Right	Side of Body Left	Total No. of Bites
Head, face & neck	0	0	0
Trunk, front	1	0	1
Trunk, back	0	0	0
Upper arm	1	0	1
Forearm	1	1	2
Hand	9	4	13
Fingers	12	9	21
Upper leg	3	3	6
Lower leg & ankle	18	21	39
Foot	18	17	35
Toes	1	4	5
Not stated	—	—	3

The four snakebite fatalities occurred in the following ways: (1) a 63-year-old Negro male laborer was bitten by a rattlesnake and died 18 days later from necrosis and abscess formation in his left leg; (2) a 55-year-old Negro male railroad section hand was bitten on his left knee by a rattlesnake and died 32 hours later; (3) an 18-year-old Negro farm laborer was bitten by a rattlesnake while working on a farm and died one and one-half hours later; and (4) a 17-year-old Negro farm laborer was bitten while cutting down a tree and died three hours later. Contrary to popular belief, few patients die within the first few hours following a snakebite. About 70 per cent of them die from six to 48 hours after venenation takes place.[6] Rattlesnakes cause more snakebite deaths than any other poisonous snakes in the United States.

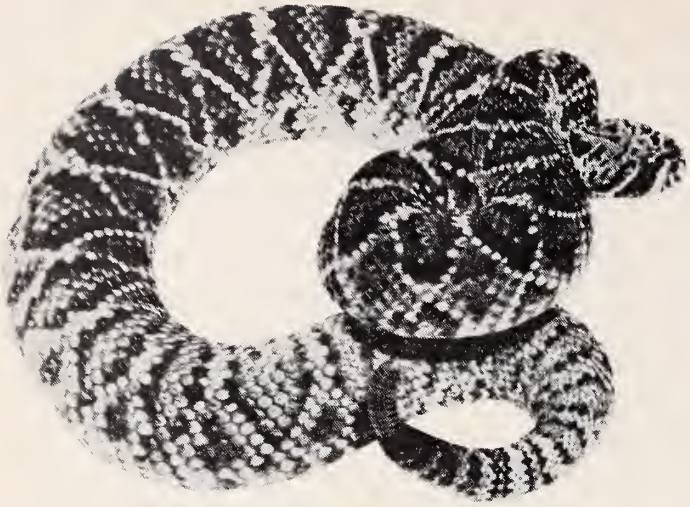
The current treatment of North American pit viper (rattlesnake, cottonmouth moccasin and copperhead) bites includes both minor surgery and medical forms of treatment. A constricting band (tourniquet) should be applied lightly to the involved extremity several inches proximal to the bite. The constricting band should be applied only tight enough to occlude the superficial venous and lymphatic flow. *It should not occlude the arterial circulation* and it should be released every ten-15 minutes for a minute or two. As edema resulting from venom poisoning spreads, the constricting band should be advanced to keep just ahead of the swelling. The purpose of the constricting band is to impede the spread of venom until incision and suction can be used to remove the venom mechanically and/or until antivenin can be administered to neutralize the venom.

Incision and suction (I.S.) is effective in removing venom from experimental animals up to about 120 minutes after the venom is injected. The sooner it is used, the larger the amount of venom that can be removed. Suction should be used for about one hour. We have found the suction cups supplied in the Cutter and the Becton-Dickinson snakebite first-aid kits effective for removing pit viper venom. Incisions, one-quarter inch long and one-eighth to one-quarter inch deep, are made into the subcutaneous tissues over the fang punctures. A few, three-five, additional incisions may be made in the surrounding edematous tissues. A large number of incisions is not needed. Immobilization aids in limiting the spread of venom. However, if one must decide between immobilization or seeking prompt medical treatment, the latter should be sought.

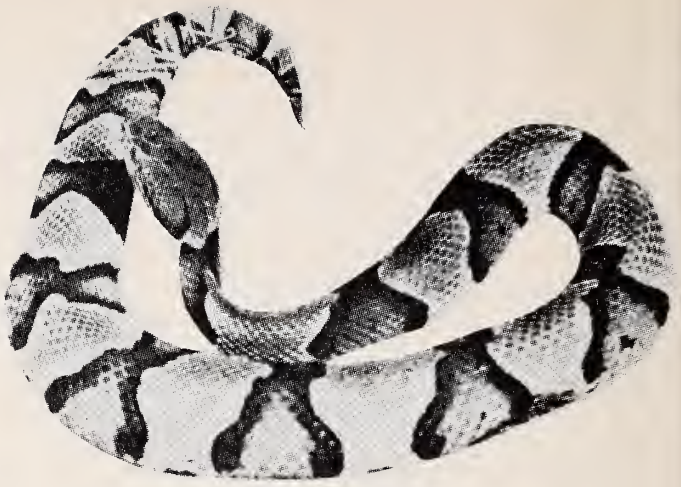
The "three A's" (antivenin, antibiotics, and tetanus antitoxin and/or toxoid) are recommended, in addition to I.S., in treating all serious pit viper bites. Antivenin Crotalidae Polyvalent (Wyeth) is effective in neutralizing the venoms of all North American pit vipers. It is not protective against coral snake venom. Since antivenin is manufactured from horse serum, the patient should receive a skin test before antivenin is given. For Grade I venenations antivenin may be administered in the deltoid or gluteus muscles. In Grade II and Grade III venenations, antivenin diluted in 1000 cc. of normal saline may be given intravenously.[7] Studies with radioisotopes have shown that antivenin accumulates at the site of the bite more rapidly after intravenous administration than after intramuscular administration.[8] Injection of antivenin into the local bite area is not a particularly effective way to administer antivenin. We have found the following amounts of antivenin useful in treating the various Grades of venenation: Grade O (no venenation) requires no antivenin; Grade I (minimal venenation) may require ten cc. (one ampoule) of antivenin; Grade II (moderate venenation) requires 30-40cc. of antivenin; and Grade III (severe venenation) requires 50 cc. or more of antivenin.

COTTONMOUTH MOCCASIN

Since snakes' mouths and venoms may harbor pathogenic organisms, antibiotics and tetanus antitoxin and/or toxoid should be given prophylactically. Gram negative organisms predominate, hence a broad spectrum antibiotic is indicated. Penicillin used by itself is not adequate treatment.



RATTLESNAKE



COPPERHEAD

Cortisone and ACTH do not affect the survival rate of animals with pit viper venom. They probably should not be used during the first few days after venenation, although they may be beneficial later in treating serum sickness resulting from antivenin therapy. Antihistamines are contraindicated as they shorten the survival time of animals poisoned with pit viper venoms. Shock resulting from venom poisoning should be treated with infusions of blood, plasma, saline solution and vasopressor drugs. Meperidine hydrochloride and other analgesics may be given to relieve pain. Recently there have been reports of excessive tissue necrosis and amputations associated with cold therapy such as packing an extremity in ice or using ethyl chloride.[8] In our opinion, cold therapy should not be used in treating pit viper bites.

Summary

An estimated 530 people are treated for bites by poisonous snakes every year in Georgia. Of these, 304 (57 per cent) are admitted to hospitals for treatment and 226 (43 per cent) are treated on an outpatient basis in hospital emergency rooms and in physicians' offices.

Of 126 in-patients reported in detail by Georgia hospitals during 1958 and 1959, 45 (36 per cent) were bitten by rattlesnakes, 23 (18 per cent) by copperheads, 12 (ten per cent) by cottonmouth moccasins, and 46 (36 per cent) by unidentified poisonous snakes. "Seasonal epidemics" of snakebites occurred in Georgia with 122 (97 per cent) of the cases reported from April through October.

Males had higher bite rates than females and whites had higher rates than non-whites. The occupational groups most frequently bitten were children —64 bites and farmers or farm laborers—20 bites. Ninety-seven per cent of the bites were on the extremities—29 per cent on the upper extremities and 68 per cent on the lower extremities. There were four deaths among the 126 hospitalized snakebite victims, a case-fatality of 3.2 per cent. The case-fatality rate for all snakebite cases (hospitalized plus non-hospitalized) was less than one per cent. Current snakebite treatment is discussed.

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ACKNOWLEDGMENT: The authors cite with gratitude the technical assistance of the following persons: Genevieve Calescibetta, Judi Pummill, Maxine Bewley and Mary Ann Preu.

OPPRESSIVE REGULATION . . . A SLOW BELL

The importance of what drug research means can be highlighted by one fact: 70 per cent of the prescriptions written in 1960 could not have been written ten years earlier—the drugs didn't exist. Oppressive regulation, no matter how well meant, would mean the ringing of a slow bell in the pharmaceutical laboratories. The losers would be the millions, alive and yet to be born, who may suffer from the manifold ills the flesh is heir to. — Editorial in *Carolina Journal of Pharmacy,* December, 1963.

PRIMARY HYPERPARATHYROIDISM

S. H. Story, Jr., M.D., *Valdosta*

■ ***A case report with a brief review of the literature is presented.***

PRIMARY HYPERPARATHYROIDISM is caused by an excessive secretion of Parathormone. About 90 per cent of the cases are due to benign adenomas of one or more Parathyroid glands; carcinoma is quite rare; the remainder are the result of benign hyperplasia.[1]

Parathormone is believed to be concerned with the precise, homeostatic control of the calcium ion in the serum within narrow limits. Excessive secretion of this hormone causes hypercalcemia which is responsible for most of the signs and symptoms of the disease.

The Disease

The true incidence of this disorder is unknown because only rarely are the parathyroid glands sought for and examined at autopsy. Case reports are increasing as awareness of and search for the disease are emphasized. The first surgically proved case was described by Mandl in 1926. The real impetus to correct diagnosis was provided by Albright and his group in 1934 when they pointed out that skeletal changes were not necessary and that search should be made among patients with urinary calculi. Black has stated that five per cent of all patients with urinary calculi and 15 per cent with recurrent stones have Hyperparathyroidism.[2] A recent editorialist in the *Annals of Internal Medicine* estimated that one out of every 1,000 to 1,500 new clinic patients will have hyperparathyroidism.[3] The disease is more common in women and rare in childhood.

For many years the designation in diagnostic circles was "bone and stone" disease. This, of course, referred to skeletal demineralization and urinary stones. Recently the gastrointestinal tract and the central nervous system have been added as target organs. Duodenal ulcer and acute pancreatitis have a significantly higher incidence than normal in hyperparathyroidism. Behavioral changes, apathy, psychosis, or unexplained coma may be the presenting clinical picture. Osseous changes are believed to reflect the duration of the disease; whereas, renal lithiasis is a manifestation of its severity.

The diagnosis of this disease is difficult because it is rare and the symptoms quite variable. Physical findings are usually scant. The clinician must think of the disease when presented with suggestive symptoms and proceed to demonstrate a consistent hypercalcemia which can be ascribed to no other cause.

The most profitable diagnostic approach is the screening of patients with renal stones by serum calcium and phosphorous determinations. Symptoms include polydipsia, polyuria, enuresis, nocturia, dysuria, kidney colic, and hematuria. Nephrocalcinosis is often present on roentgenograms.

Average Diet

The average American diet has a high calcium content, and this may account for the frequent absence of bone changes; the high calcium intake keeps up with the drain on the skeleton. When present, the bone changes vary from slight generalized demineralization to giant bone cysts and pathological fractures. Epulis or loosening of the teeth may be presenting complaints. Tendon avulsions have recently been reported. Disappearance of the lamina dura on dental films has been overemphasized as a frequent finding in this disorder. Probably the most sensitive radiological sign is subcortical bone resorption, seen best on X-rays of the hands.

DATE	SERUM CALCIUM (9.0-11.0)	SERUM PHOSPHORUS (3.0-4-5)	ALKALINE PHOSPHATASE (1.5-4.0 BOD. UNITS)	URINE SULKOWITCH	NPN (25.0-35.0)
July '62	14.2	4.1			48.5
2/14/63	13.2	2.7	3.6		
2/15/63	13.4	3.1	4.0		
				Marked turbidity	
2/16/63	15.0				
2/18/63	13.4	2.35	4.1		
2/19/63	——— OPERATION ———				
2/20/63	11.4	2.3			
2/22/63	10.4	3.7			
2/23/63	7.8	3.4	4.2	Normal	27
3/1/63	10.0	4.3			

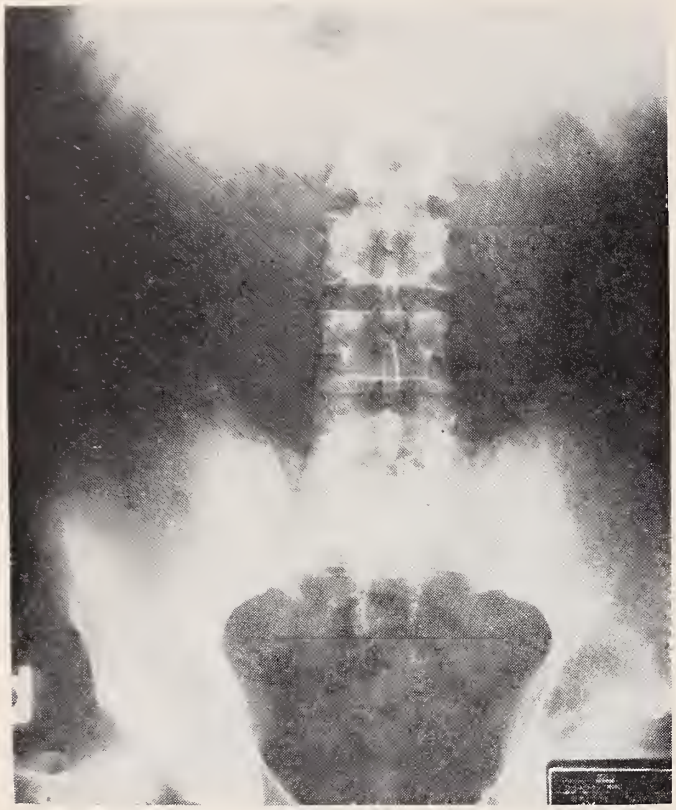


Figure 1
KUB X-ray reveals bilateral renal calcifications.

An ulcer patient who becomes worse on the usual Sippy program should be strongly suspected of having a parathyroid adenoma. Patients who have attacks of pancreatitis or have pancreatic calcifications on X-ray should also arouse suspicion. Other suggestive gastrointestinal symptoms are persistent nausea, pernicious vomiting, severe constipation, weight loss and unexplained abdominal pain.

Snapper has reported that psychic features may be so striking as to overshadow any other symptoms. Apathy, agitated depression, psychosis with hallucinations or delusions, paranoia, or organic brain syndrome may be encountered.[4] These symptoms are believed to be caused by the elevated serum calcium. A hypercalcemic crisis has been described with the acute onset of anorexia, abdominal pain, muscular weakness, vomiting, psychic derangement, and coma.[5]

Rarely is a mass palpable in the neck. Sometimes barium swallow will demonstrate a tumor in the cervical region. A few victims will have painful bony deformities.

The Laboratory

To an unusual degree the diagnosis is dependent upon the laboratory. The cardinal laboratory finding is a consistent hypercalcemia—the mean value of numerous determinations done over a period of days. This must be present to entertain the diagnosis of hyperparathyroidism. Other helpful findings are a low serum phosphorous and an elevation of the serum alkaline phosphatase. Kyle and his group report that an elevated phosphate clearance test is a valuable aid in the diagnosis, second only to

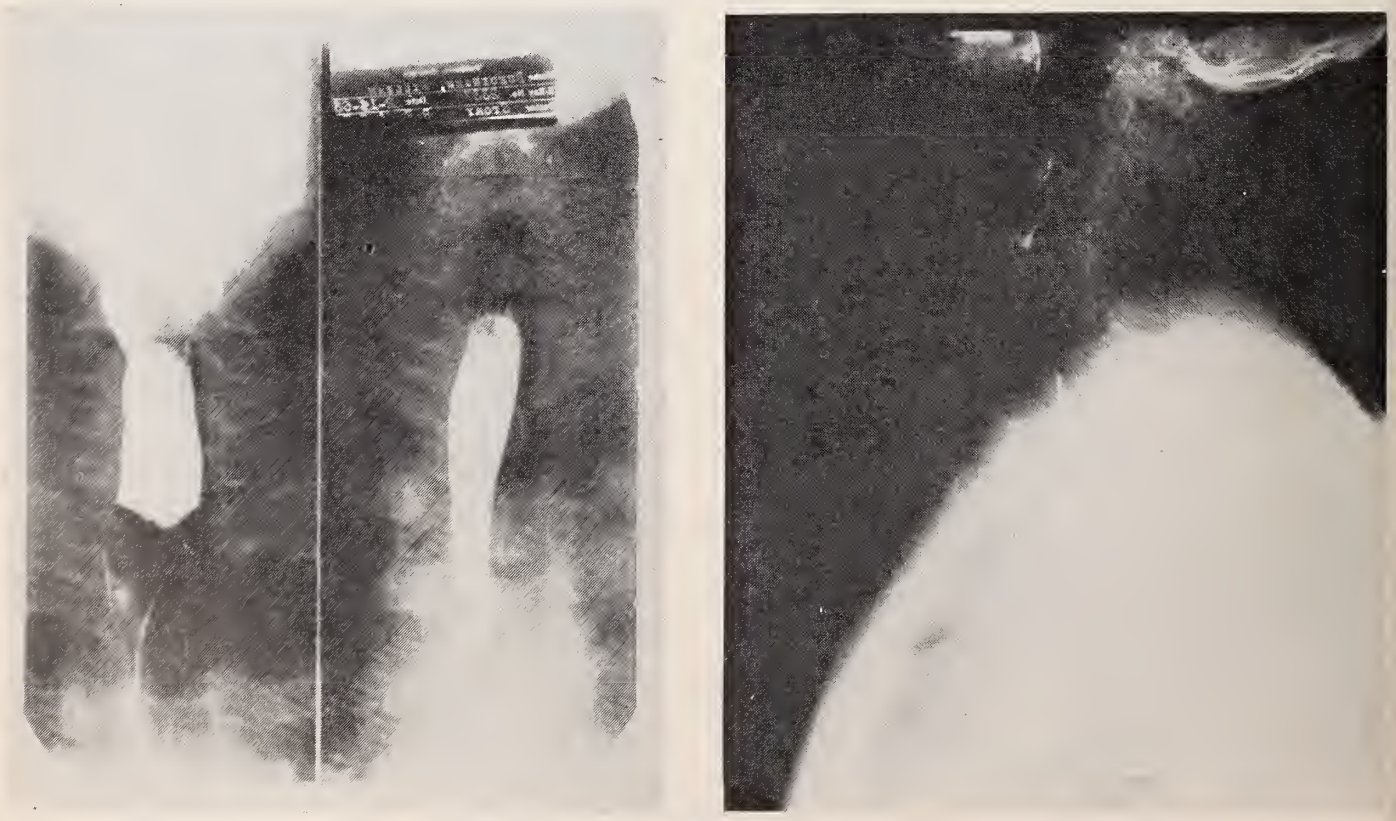


Figure 2
Barium swallow reveals no evidence of a mass in the necks

hypercalcemia.[6] It is to be hoped that a method of measurement of the serum parathormone level will be developed to facilitate the diagnosis.

After hypercalcemia is established, other causes must be eliminated. The seemingly ever-growing list of these now includes: thyrotoxicosis, sarcoidosis, neoplasm with or without skeletal matastases, immobilization, Vitamin D intoxication, milk-alkali syndrome, and laboratory error. Keating has suggested that diabetes mellitus and hypothyroidism may also cause elevation of the serum calcium.[7] If after careful study and appropriate tests the diagnosis remains in doubt, a therapeutic trial of steroids for a week or ten days in rather high dosage may be helpful; the calcium level is rarely affected in hyperparathyroidism, whereas it is generally lowered in all of these other conditions. The possible coexistence of one of these disorders and hyperparathyroidism must be kept in mind; also multiple endocrine adenomas.

The treatment is surgical removal of the offending parathyroid gland or glands. The prognosis depends upon the extent of renal damage and secondary hypertension present when the diagnosis is established and corrective surgery performed. A case report follows.

Case Report

W. B., a 36-year-old married white male businessman was admitted to Pineview General Hospital on February 13, 1963, for investigation of possible hyperparathyroidism.

While on vacation in Wisconsin in July, 1962, he had the sudden onset of left ureteral colic and gross hematuria. He was hospitalized and IVP X-rays revealed bilateral renal calculi and two stones in the upper one-third of the left ureter; the ureteral stones were removed by operation on July 31, 1962. During this hospitalization a serum calcium was 14.2 mgm. and the phosphorous 4.1 mgm. He was advised to have further study on his return home. Since he remained asymptomatic, six months elapsed before he presented himself for study.

Figure 4a
Parathyroid Tumor

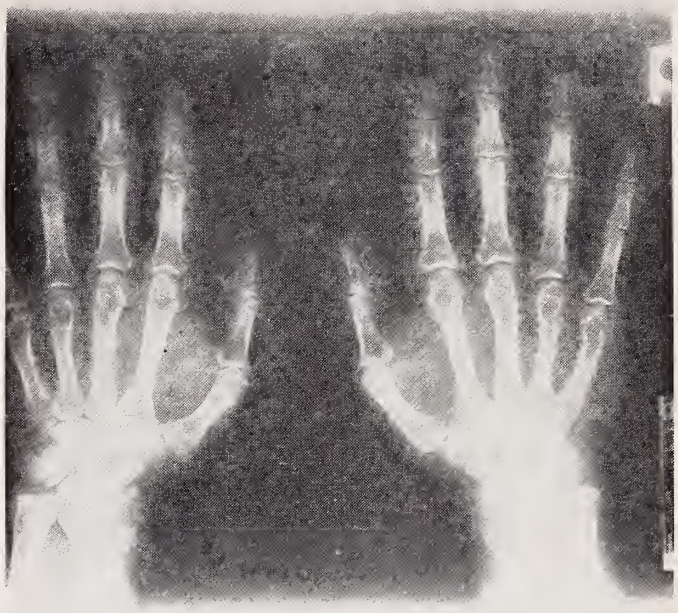


Figure 3
No subcortical bone resorption.

There was no prior history or family history of urolithiasis. Review of upper G. I. X-rays done in April, 1960, showed no calcifications in the renal areas and a normal duodenum.

Physical examination was essentially negative with a blood pressure of 118/76, no palpable mass in the neck, and no costovertebral angle tenderness.

Urine Sulkowitch test was strongly positive. The NPN was 48.5 mgm. per cent. Table I depicts serial calcium and phosphorous determinations showing a consistent hypercalcemia. Serum proteins were normal.

A scout film of the abdomen (Figure 1) revealed multiple calculi over both kidney regions and in the area of prostate gland or seminal vesicles. Chest X-ray was normal, but upper G. I. series showed a duodenal deformity without an active crater. Barium swallow (Figure 2) did not demonstrate a mass in the neck. The lamina dura was intact on dental films; X-rays of the hands revealed no sub cortical bone resorption (Figure 3).

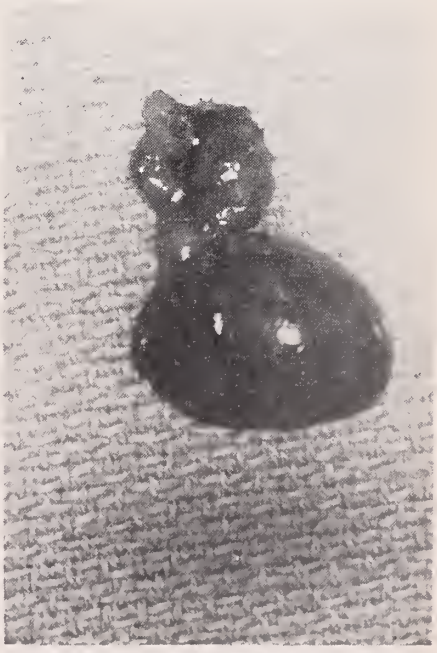


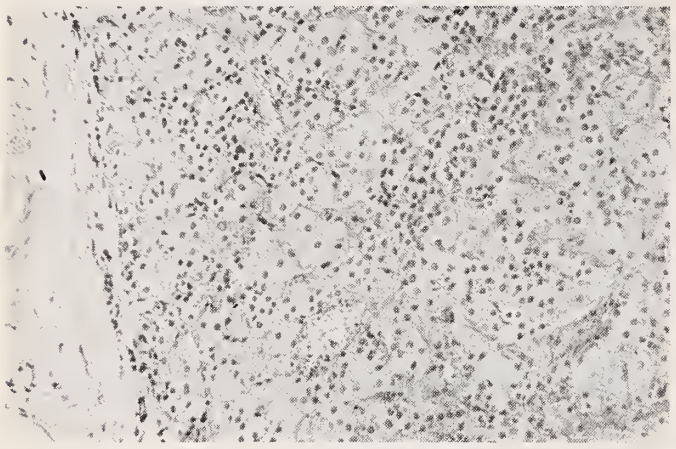
Figure 4b
Parathyroid Tumor

Hyperparathyroidism / Story

Exploration of the neck was done on February 19, 1963, by Dr. William Retterbush. A pedunculated tumor two by 1.5 cm. of the left lower parathyroid gland was removed from beneath the left lower pole of the thyroid gland. The three remaining parathyroids were identified and appeared normal. The postoperative course was uneventful, and he was discharged from the hospital on February 23, 1963. Pathology reported a benign parathyroid adenoma.

Comment: This case illustrates detection by screening a patient with nephrocalcinosis with serial calcium and phosphorous determinations.

Doctors Building



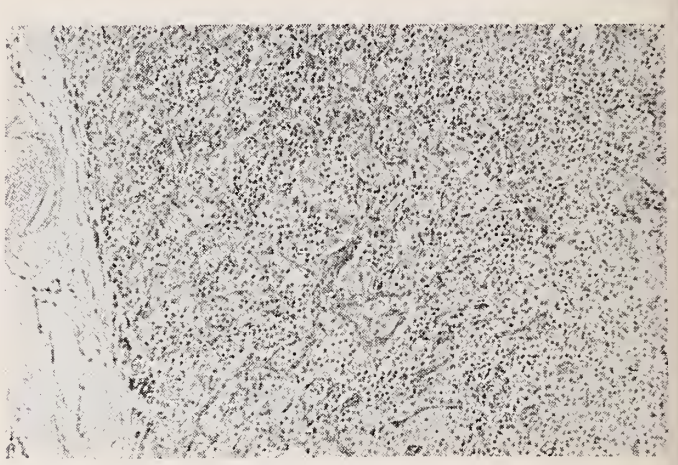


Figure 5
Benign Parathyroid Adenoma.

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(A complete bibliography may be obtained by writing to JMAG, 938 Peachtree Street, N.E., Atlanta, Georgia 30309.)

1964 CALENDAR OF MEETINGS

State

August 9-14—Annual Southeastern School of Alcohol Studies, Center for Continuing Education, University of Georgia, Athens. Contact: *Charles B. Methvin, 1260 Briarcliff Rd., N.E., Atlanta, Ga. 30306.*

September 20-21—Scientific Sessions of the Georgia Heart Association, Augusta Town House, Augusta.

May 2-5, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

August 8—Medical Scientific Seminar (Second Muscle Shoals Medical Assembly) sponsored by the Muscle Shoals Chapter of the Alabama Academy of General Practice, Turtle Point Yacht and Country Club, Florence, Ala.

August 20-22—Seventeenth Annual Postgraduate Obstetric-Pediatric Seminar, Daytona Plaza Hotel, Daytona Beach, Fla.

August 20-22—West Virginia State Medical Association, Greenbrier Hotel, White Sulphur Springs, W. Va.

August 24-27—Fourth Inter-American Conference on Toxicology and Occupational Medicine, sponsored by the University of Miami School of Medicine with the cooperation of the University of Puerto Rico School of Medicine, Fountainebleau Hotel, Miami Beach, Fla.

August 25-28—American Association of Blood Banks, Shoreham Hotel, Washington, D.C.

September 10-12—American Association of Obstetricians and Gynecologists (members and invited guests), The Homestead, Hot Springs, Va.

September 16-18—American Association of Medical Clinics, Americana Hotel, Bal Harbour, Fla.

September 24-26—Dixie Postgraduate Assembly, Dauphin Island (Mobile) Ala.

September 25-26—American College of Obstetricians and Gynecologists, (District 7), Dinkler-Tutwiler Hotel, Birmingham, Ala.

September 26-27—Congress on Occupational Health, Rice Hotel, Houston, Tex.

September 28-29—Tennessee Valley Medical Assembly, Tivoli Theatre, Chattanooga, Tenn.

National

August 24-27—Annual Meeting of the American Academy of Physical Medicine and Rehabilitation, Statler-Hilton Hotel, Boston, Mass.

November 29-December 2—American Medical Association Clinical Meeting, Auditorium and Exposition Hall, Miami Beach, Fla., and the Americana Hotel, Bal Harbour, Fla.

DIABETES MELLITUS — A PUBLIC HEALTH PROBLEM IN GEORGIA

Charles H. Brown, M.D., *Guyton, Georgia*
Dan H.G. Glover, M.D., *Jesup, Georgia*

■ ***Screening for diabetes at an early age is becoming increasingly important***

EMPHASIS placed on control of communicable diseases is gradually being supplanted by increased concentration on chronic diseases and their effect on community health. The know-how and prevention of chronic diseases, one of which is Diabetes Mellitus, has been long in coming, and a more concentrated effort will be necessary before much is done in primary prevention of chronic diseases. The great strides that have been made in medical technology, which have resulted in a larger share of the population living to grow older, have forced our attention towards the major problems of the aged—chronic disease.

The 1960 census revealed that 25.1 per cent of the population of Georgia was 45 years and older, while in 1950, this age group comprised 22.2 per cent of the total population. During the period of 1952 to 1961, 86.3 per cent of the deaths due to Diabetes Mellitus in Georgia occurred in age groups 45 years and older.

A review of the Georgian death records for the period 1952-1961, results of which are shown in Table I, reveals 4,381 Georgia residents died from Diabetes Mellitus during this period. Four hundred and ninety-nine deaths occurred in 1961, placing Diabetes as the tenth leading cause of death in that year. The distribution of deaths due to Diabetes Mellitus during this ten year study period by race, sex, and age is of interest and shown in Table II and graphically demonstrated in Figure 1. Although

TABLE I

Deaths and Death Rates Per 100,000 Population For Diabetes Mellitus, Rank as to Cause of Death By Race and Sex, Georgia, 1952-1961

		TOTAL		WHITE MALES		WHITE FEMALES		NONWHITE MALES		NONWHITE FEMALES	
YEAR	RANK	DEATHS	RATE	DEATHS	RATE	DEATHS	RATE	DEATHS	RATE	DEATHS	RATE
*1962		521									
1961	10	499	12.2	146	10.4	169	11.9	53	9.4	131	21.5
1960	11	489	12.2	153	10.1	139	9.1	64	11.5	133	22.3
1959	13	431	10.3	126	8.2	137	9.8	59	10.4	109	18.6
1958	12	451	11.2	137	9.1	148	10.7	56	10.2	110	18.3
1957	13	426	11.7	121	8.1	165	11.1	49	9.4	91	15.2
1956	14	399	10.2	121	9.2	127	9.6	52	9.4	99	16.5
1955	12	422	11.4	124	9.7	130	10.4	49	9.2	119	20.2
1954	13	410	11.6	129	10.1	137	10.7	49	9.2	95	16.3
1953	13	434	12.4	135	10.8	153	13.3	52	10.1	94	16.3
1952	14	420	11.8	145	11.8	122	9.7	48	9.2	105	18.3
TOTAL		4381		1337		1427		531		1086	

*Projected figure for 1962.
Biostatistics Service — Georgia Department of Public Health.

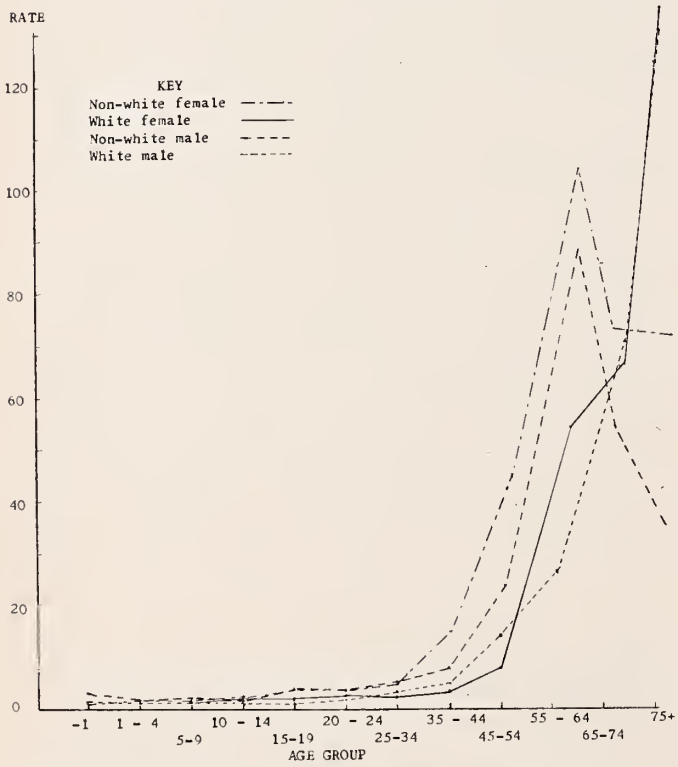
TABLE II

Death Rate Per 100,000 Population for Diabetes Mellitus, By Race, Sex, and Age Groups, Georgia 1952-1961

RACE AND SEX	AGE GROUP											
	-1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
TOTAL	.7	.2	.4	.5	1.3	1.6	2.5	5.3	17.4	39.3	66.5	101.9
Males	.9	.3	.5	.4	2.0	1.7	4.2	.7	18.1	56.8	62.7	83.5
Females	.6	.4	.4	1.1	1.0	2.2	3.3	8.6	26.9	79.1	70.0	103.0
White	.7	.2	.2	.3	.6	1.2	2.2	3.4	10.4	40.4	68.6	131.7
Males	.7	.2	.2	.1	.4	.8	2.9	4.3	13.0	26.5	70.8	130.1
Females	.7	.2	.2	.5	.7	1.6	1.4	2.5	7.8	54.3	66.3	133.3
Nonwhite	.9	.6	.7	1.1	2.4	2.6	5.3	12.3	34.6	95.5	64.1	54.7
Males	1.1	.3	.8	.6	3.6	2.5	5.5	9.7	23.2	87.0	54.5	36.8
Females	.6	.8	.6	1.6	1.3	2.7	5.1	14.8	46.0	103.9	73.7	72.6

Biostatistics Service — Georgia Department of Public Health.

deaths occur in all ages, a marked increase occurs between the ages of 35 and 54 in the white population, and between the ages of 24 and 44 in the non-white population. From this upturn in incidence, there is a dramatic increase to a peak of 133.3 per 100,000 population in the white females in the 75 and over age group, and the white male is second with 130.1 per 100,000 in the same age group. The non-white population demonstrates an increase some ten years earlier and reaches a peak of 103.9 per 100,000 in the non-white female in the age group 55 to 64, some ten to 20 years ahead of her white counterpart. The non-white male reaches a peak in the same age group, but at a lower level of 87.0 per 100,000. A similar ten year study done on Diabetes of the residents of Florida, demonstrated a marked rise in deaths in age group 25 to 34 and reached a peak of 133.6 in age group 55 to 64, which demonstrates a peak higher and ten years earlier than the Georgia figures. This Florida study also demonstrated the non-white male reaching a peak at 65 to 74 at 72.0 per 100,000, whereas the Georgia figures place the non-white male's peak at 55 to 64 at 87.0 per 100,000.



Biostatistics Service - Georgia Department of Public Health

Figure 1

Average death rate per 100,000 population according to age group, due to Diabetes Mellitus, by race, and sex, Georgia, 1952-1961.

This look into the deaths from 1952 to 1961 in Florida and Georgia points up the necessity of additional study of this disease to determine among other things, why the non-white population dies earlier than the white. The marked upswing in deaths beginning at 25 years of age also points up the need to screen Diabetes prior to this age.

Box 7
Guyton, Georgia

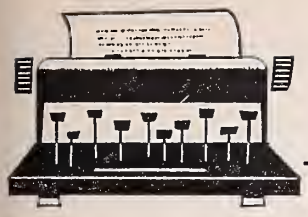
References

1. Fulgham, James E.: "Diabetes as a Health Problem in Florida."
2. From the Bureau of Vital Statistics, Georgia State Board of Health.
3. Publication, *The Journal of the Florida Medical Association.*

$500 AWARD OFFERED IN CALEB FISKE ESSAY CONTEST

The Trustees of America's oldest medical essay competition, the Caleb Fiske Prize Essay of the Rhode Island Medical Society, announce as the subject for this year's dissertation "Recent Advances in the Control of Respiratory Virus Diseases, Including the Exanthemata." The essay must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $500 is offered. Essays must be submitted by December 11, 1964.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence, Rhode Island 02903.



EDITORIALS

Nursing Home Standards In Georgia

THE GENERAL PUBLIC is enlightened as to the need for nursing homes of superior quality in the state of Georgia. It is the duty of the entire membership of the Medical Association of Georgia to comprehend this need and assume active leadership in consultation, inspection, and accreditation. Each practicing physician must take an interest in each nursing home within his geographical domain and insist on quality care, and further, to participate in this care whenever and wherever his services are needed.

Fourteen Member Organization

During the year 1964 the Georgia Hospital-Medical Council, which is composed of 14 member organizations representing the Medical Association of Georgia, Georgia Hospital Association, Georgia Associating Hospital Governing Boards, Georgia Chapter of Hospital Administrators, Georgia Department of Public Health, Georgia Nursing Home Association, Georgia Department of Family and Children Services, and five medical specialty societies, has developed a program of inspection for nursing homes in Georgia. This program includes a standard manual which will serve as a guide for nursing homes as well as for inspection teams. When a nursing home complies with the standards set forth in this manual, it will be a superior nursing home and will receive a certificate of approval.

The mechanism for inspection is already set up within the framework of the Georgia Hospital-Medical Council. The inspection teams are composed of volunteers who serve without pay. Each team is composed of a physician, nursing home administrator, and a hospital administrator. The inspection team will complete several check-lists which will include every phase of the nursing facility. These check-lists will be reviewed and acted upon by the entire Georgia Hospital-Medical Council, which is the only body empowered to grant approval or non-approval.

A Pioneer Venture

This is almost a pioneer venture, since the national accreditation program has just begun, and there is only one other state which has its own program. This is a local Georgia program developed specifically for the improvement of patient care in nursing homes in Georgia. It will be maintained in accord with any national accreditation program now in existence or which may be developed in the future.

The success or failure of this activity in the state of Georgia rests on the shoulders of physicians, hospital administrators, nursing homes administrators, and all other health service persons or agencies. The people of our state look to us for leadership, and we must accept the challenge and produce results which will be a model for the entire nation.

The nursing homes must have the full cooperation of local physicians for patient care, consultation, and guidance. Without the attending physician, a nursing home cannot fulfill its obligation to the patient. The Georgia Hospital-Medical Council must also make demands on their time to serve on inspection teams even while the inspection and approval of small hospitals continue.

Truly, these are services of love and dedication which are the trademark of the physicians and health agencies in our state of Georgia. The rewards will be rich, even though often intangible.

Charles T. Cowart, M.D.

Suicide and Depression

THERE CAN BE no more vexing problem in the field of mental health than the detection and treatment of the suicide prone patient. All too frequently these patients fail to present disturbing overt symptomatology which could alert others to the real gravity of their suicidal impulse. The doctor seeing such patients as well as the patient's relatives are nearly always in a state of anxious consternation. There is always the tendency to minimize the danger by denying the seriousness of the threat. In other instances the question always concerns the sincerity of the patient. The not uncommon idea that the patient who talks about taking his life is the one least likely to do so is a commonly held mental placebo. The corol-

lary that the genuine suicidal patient doesn't talk about it, is also widely accepted. Like a great many common ideas, there appears to be some credence to both. Up to a point the patient who worries his family by suicidal threats and talk may actually be saving his own life. Punishing his family by this means he finds an outlet, albeit a distorted one, for his pent-up primitive aggressiveness. For a time he may receive reassurance and affection which these patients need in great quantities. Sooner or later the family can no longer tolerate the patient's threats and demands. The external outlet is no longer gratifying; the patient, becoming more and more depressed may then turn his sadism upon himself. Here in a nutshell is the basic mechanism of many suicides. The patient, in an infantile way, blames his objects for his unhappiness. He wishes to punish them for what he feels is their neglect, criticism, rejection, etc. Murder as revenge is blocked because he also loves and needs them. Instead he kills himself.

To Judge Himself

From a clinical point of view the torturous dilemma as to the genuineness of an individual's suicidal threat cannot be settled because the most honest patient may not be able to judge himself. Other patients obtain gratification and attention from the consternation they cause around them.

Suicide, depression and inferiority feelings are all interelated and therefore are of far reaching importance. Depressed patients have never progressed to an adult capacity for love. They need evidence of love from their objects, and can only love when assured they are loved. In this respect they continue to behave like small children who need mother's approval of their behavior in order to have a good feeling about themselves. When they feel the love to be withheld or insufficient they react with anger or by being ingratiating, or both, to recover the lost love. They have never been able to cope with ordinary frustrations. The same things which bother them also cause a normal person to lose their self-esteem. They are disappointments in love, failures, deaths, etc. Whereas the normal person copes actively with these events, the depressed patient reacts as if he were abandoned, helpless and even annihilated. He cannot recover himself, nor achieve any gratification because, in his opinion, all his efforts have ended in failure in the past. Paradoxically, some of these patients have achieved considerable real success in their lives and yet their depression may actually increase. They feel that the success (love) will eventually be taken from them as it has in the past—in childhood; or that they don't deserve the success because of the guilt engendered by their demands. The timid characters who react to any criticism as if it were a sadistic assault; the spoiled child, as well as the overly aggressive patient who is never satisfied, belong to the group of sensitive depressed suicidal types. Unfortunately these individuals are not often looked upon as ill, largely because their personality characteristics are so common, and therefore treatment is delayed.

The ideal early treatment of depressions should consist of a psycho-therapy geared to helping the patient adopt a more gratifyingly adult way of coping with frustration, so that he may not have to rely upon painful infantile mechanisms. These patients are often so demanding as to make treatment difficult and long.

Intensive Psychotherapy

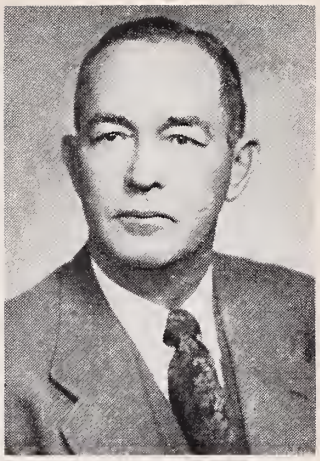
The only rational and really curative treatment of patients with depressions is intensive psychotherapy. The patient must develop the capacity to go through the often painful process of learning more gratifying techniques to obtain painful esteem. That these patients are regressed to the infantile state where they are dependent on parents for love indicate that the roots are deep and that a satisfying result in treatment requires arduous work. Better results will be obtained when it is recognized that the moodiness, sullenness, tantrums, etc., of childhood and adolescence often represent the depression in early genesis, and is not inherited or "something he'll grow out of." If the young patient and his family can be treated early enough, then preventive psychotherapy will have a real and important meaning, and later severe depressions and suicides will be avoided.

Simeon L. Feigin, M.D.
120 East 36th Street
New York, New York

THE DANGERS OF FDA ADVERTISING CONTROLS

If one stops to think about it, the effect of government-muzzled (drug) advertising is one that curtails not only advertising, but also independent text which it monetarily supports. In other words, it tends to abolish freedom of the press. We begin to wonder if this had been one of the diabolical aims of the Fedicare faction. That is, not so much to protect people from poisonous potions as to strip power of the American medical professions; not so much to bless people as to boss them. — Editorial in *Northern Virginia Medical Bulletin,* September, 1963.

PRESIDENT'S LETTER



J. G. McDaniel, M.D.

THE MAGIC NUMBER

To be elected to public office, our representatives in various forms of government must have some popular cry. Townsend thought about the old folks several decades ago, but there were not enough of them at that time—and besides that, children still thought that they had a responsibility insofar as their parents were concerned. His plan was more or less ignored, but those astute in politics earmarked it for a later day.

The Yeoman Cry

For a good many years now the yeoman cry has been that when one reaches the age of 63 or 65 years, then church is out. Their usefulness is over! Men or women are uniformly turned out to green pastures by request of labor organizations, insofar as the workers are concerned, and by corporations and businesses where their executives are concerned. These are the people that our paternalistic fathers in Washington, D. C., lump all together. These same paternalistic fathers then put on a dour face, and clad themselves in sack cloth and ashes when they think of the physical and mental and financial plight of this elderly group.

In the politicians' great enthusiasm, it never occurs to them that many of their own body in the Congress, the Senate, the Supreme Court, and even Presidents, have been and are now past the magic age—and should properly be delegated to the rocking chair, according to their own formula.

This brings me to what I want to say—I get so weary of the hue and cry of the plight of the aged. There's no doubt that a goodly number of our oldsters are blessed with bodies that have outlived their mentalities, and I agree that many need help in one way or another. I am strongly for helping those that need it. But . . . the thing I'd like to stress and to shout is that some of the most delightful people I know are well in their late sixties, seventies and eighties. They are physically sound, sharp as a tack mentally, and financially solvent. I get tired of politicians and news media continually belittling all the old folks. The majority were retired at 63 or 65 years and as far as I am concerned—as their physician—a large number were in the prime of life. I see them slowly wither on the vine—especially those who devoted all their thoughts and energies to their field of endeavor and seldom, if ever, played.

When I look over my book at the close of the day, the only people who have paid cash for the office visits are either a visitor in the city, or a senior citizen. Time after time I have seen the son or daughter bring in an aging parent, either from Atlanta or a small town, and both get treatment. The parent wants to know "how much" and pays it—the offspring puts it on the books. Just last week, a couple well in their seventies wanted to pay for their office visit. The old gentleman produced a rather large bill. When my secretary could not make the change, she suggested that the account be put on the books until the next visit. He replied, "No, when we leave this office, I want to know that all the money I have in my pants pocket belongs to me."

The Mulish Spirit

I like the mulish spirit of grandpa and the indomitable courage of grandma, especially when illness visits them. Woe betide the young doctor who positively predicts that either will not live through the night. He may find them eating a hearty breakfast the next morning—as I did one time.

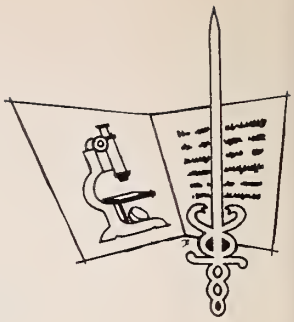
We, as physicians, need to get it across to labor unions, corporations, politicians and business in general that a certain birthday is not a magic number. Some are older at 50 than others at 70. Citizens should be permitted to work as long as they have the desire, and are physically and mentally capable to perform the task.

A story that I've always loved was about John Quincy Adams, when he was 80 years old. Someone told him that a young congressman was ridiculing him on account of his age. The delightful old gentleman remarked, with a twinkle in his eye, "Tell that young man that a jackass is older at 30 years than a man at 80 years."

J G McDaniel

President, Medical Association of Georgia

CANCER PAGE



CANCER OF THE STOMACH

Charles H. Richardson, Jr., M.D., *Macon*

CANCER OF THE STOMACH as a cause of death has been reported to be decreasing. This may be more apparent than real and due to more accurate reporting of abdominal causes of death. State of Georgia figures for the last 22 years show fairly constant stomach cancer deaths of about 300 individuals a year with males predominating 2:1, although the rate per 100,000 population has decreased somewhat.

Nationally the five year survival rate of treated cases increases each year. With advances in surgical technique, anesthesia and over-all management, the prognosis for a patient with early cancer of the stomach is fairly good approaching that of cancer elsewhere. The difficulty comes in early recognition and adequate treatment.

No Early Symptoms

There are no specific early symptoms. Weight loss, change in digestive patterns, anemia and weakness indicate a well established process. Some clinical leads may indicate screening processes. Males over 40, those with achlorhydria, and pernicious anemia patients are more likely to develop gastric carcinoma. In these, gastric acidity and cytology studies may be indicated. However, the best available tool is the gastro-intestinal X-ray series which warrant its more frequent use in those who have any suspicion of gastric disease. In evaluating questionable cases and those with negative X-rays, gastroscopy may be of value.

Whether benign gastric ulcers become carcinomas or not, a significant number of gastric ulcers do prove to be malignant when resected, and those with the more benign appearance have the best prognosis. Because of this and the low mortality rate, early radical surgery is advised for all cases of gastric ulcer with no free acid, those which do not heal promptly by X-ray and those that have the radiological appearance of cancer from the beginning.

Only Known Cure

Surgical resection is the only known cure and to date the best palliative treatment. Approximately 25 per cent of operable cases have no involved lymph nodes and in these, the five-year survival is in several centers now better than 50 per cent. With involved adjacent nodes and tumor limited grossly to the stomach, a 15 to 20 per cent five year rate is reported. Because of the tendency of the disease to spread, wide resection should be done initially. Total gastrectomy carries a higher mortality and morbidity and is usually reserved for large fundus lesions that are still operable and possibly curable. Wide subtotal resection with removal of spleen, omenta and a three cm. cuff of duodenum or esophagus, depending on whether the lesion is distal or proximal, is the treatment of choice.

Until more information becomes available as to the course and treatment of gastric cancer, we must strive for early recognition and adequate surgical treatment. This means not ignoring gastric symptoms without thorough investigation and aggressive treatment of gastric lesions.

724 Hemlock Street

Approved by the Professional Education Committee, Georgia Division, ACS.

"THESE MEN SHE GAVE" NOW IN SECOND PRINTING

These Men She Gave, a Civil War diary of Athens, Georgia, first published in January of this year has been so well received that it is now in its second printing. Written by Dr. John F. Stegeman of Athens, and published by the University of Georgia Press, this fascinating chronicle of life in Athens during the War Between the States will prove of great interest to all who were privileged to spend some part of their life in Athens. The entire volume is exceptionally well documented and reflects an extensive degree of research by the author. The war is described through the eyes of the soldier rather than the historian. They tell their own battlefield tales, not of strategy and command, but of hope and fear, gallantry and cowardice, exaltation and despair. John Stegeman has given us a warm human account of some trying and heroic times in the life of a town that many of us still feel close to.

THE SELECTION OF CARDIAC PATIENTS FOR SURGERY — I

William D. Logan, Jr., M.D., *Atlanta*

During the past fifteen years, heart surgery has developed at an amazing speed. With this development, indications for surgery have also changed with great rapidity. Cardiac defects considered inoperable last year may be repairable this year. Therefore, any rigid criteria set now may be changed in the next few years as improved techniques develop.

As a general statement it is presumed that all defects, congenital or acquired, causing significant cardiac overwork, malfunction, or potential danger, should be corrected. However, some of these may carry very high surgical risk and therefore are handled better medically. As the surgical mortality improves, these may be reconsidered. The following is a classification of cardiac problems that are considered for surgery.

Extra Cardiac Lesions

1. *Persistent Ductus Arteriosus*:

The mere presence of a persistent ductus is usually indication enough for surgery. These patients should be operated any time after three years of age, and before this if any difficulty arises.

2. *Aortic Pulmonary Window*:

These defects are outside the heart and occur between the pulmonary artery and aorta just as they emerge from the ventricles. They are similar in physiologic function to a ductus arteriosus or ventricular septal defect. This defect should be fixed as soon as a diagnosis is made if the child is over three years of age. There are the potential dangers similar to the persistent ductus arteriosus or ventricular septal defect.

3. *Coarctation of the Aorta*:

Coarctation of the aorta which occurs distally to the left subclavian artery is usually asymptomatic for several years. The presence of unexplained hypertension and absence of femoral vessels may give a clue when the patient sees a physician for other complaints. If there is significant coarctation to produce a decrease of pressure in the lower extremities and an increase in the upper extremities, it should be corrected surgically. The ideal time for surgical correction is between eight and 12 years of age. Any time a diagnosis of coarctation is made after this age, surgery should be done then. Infrequently, infants develop clinical difficulties with coarctation, and if medical management does not suffice, surgery should be considered. However, there is a high mortality in the younger group and the small aorta makes surgery technically difficult.

4. *Anomalous Pulmonary Venous Drainage*:

Occasionally the pulmonary veins will return to the heart in an abnormal position and therefore bring the oxygenated blood to the wrong side. When there is evidence of inadequate blood returning to the left heart because of anomalous venous drainage, surgery should be considered. There are numerous varieties of this problem, and each case must be considered individually.

5. *Persistent Left Superior Vena Cava*:

This defect generally causes no significant physiological change in heart action and does not need surgical correction.

6. *Abnormalities of the Pulmonary Artery*:

These abnormalities vary from hypoplasia with segmental coarctation to complete agenesis of the pulmonary artery. These must be considered individually.

7. *Pulmonary Arterio-venous Fistula*:

Abnormal communications between the pulmonary artery and vein in the parenchyma of the lungs occur infrequently. If these shunts are large enough to cause some desaturation of systemic arterial blood, surgery should be considered. All care must be exercised to be sure they are not multiple, and if so, managed accordingly.

Combined Extra Cardiac and Intracardiac

1. *Tetralogy of Fallot*:

Also considered are those patients with pulmonary

outflow tract obstruction and associated ventricular septal defects, or the so-called Tetralogy of Fallot group. In these, if the hematocrit is high and the patient has had any syncopal episodes, surgery should be considered.

Total correction should be done if the patient is three years of age or older. If there is significant trouble in the younger age group with cyanotic episodes and a very high hematocrit with polycythemia, palliative procedures, such as the Blalock subclavian to pulmonary artery anastomosis or the Brock procedure, should be considered. These procedures will improve the patient until he has become old enough to have total correction.

2. *Transposition of the Great Vessels*:

This classification of defects is one of the most difficult that the clinician sees today. There are some who do very well for many years, but most die within the first year of life. Some have other defects associated—including pulmonary stenosis, ventricular septal defects, and atrial septal defects. It is important to be sure which group the particular patient may be in. Several surgical procedures have been attempted, with few good results. If the patient is having difficulty, studies should be done to see if some surgical procedure might help.

Emory University Clinic
P. O. Box 459

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

THE DOCTORS BROWN — AN ENVIABLE HERITAGE

When Dr. Walter Edward Brown, Jr. of Savannah received his degree from the Medical College of Georgia in June he was the fifth generation of his family, without a skip, to graduate from the 135-year-old institution at Augusta.

Here is how the five generations of doctors line up:

Dr. Paul Chase Davidson, great-great grandfather, Sharon, Georgia, Class of 1842.

Dr. Arthur Chase Davidson, great grandfather, Sharon, Class of 1877.

Dr. Lawrence Ruffin Brown, grandfather, Sharon, Class of 1888.

Dr. Walter E. Brown, father, Savannah, Class of 1930.

Dr. Walter E. Brown, Jr., Savannah, Class of 1964.

Young Dr. Brown's great uncle, the late Dr. Albert A. Davidson, taught in the Medical College of Georgia for many years. Another uncle, Dr. F. Bert Brown, graduated in the Class of 1926 and was an associate in the Department of Surgery. He is now in Savannah.

It will be noted that the first three members of the family out of medical college practiced in Sharon, a small town in eastern Georgia. In addition to being a doctor, Dr. Arthur Chase Davidson, was an ordained Methodist minister. The doctor-minister and Dr. Lawrence R. Brown looked after the medical needs of a great area. Among their patients were the priest, nuns and boys at the old Catholic school in Sharon.

Reprinted from the Savannah Morning News, May 17, 1964, "City Beat," by Frank Rossiter.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee/May 2, 1964

Voted to approve reappointment of A. B. Conger to State Hospital Advisory Council to State Board of Health.

Voted to appoint George Dillinger to State Mental Health Authority.

Voted to defer appointment of new member to Mental Health Committee, after resignation of one member, until June, when all appointments will be made.

Discussed: Affiliate membership with AMA for MAG; deferred until Annual Session.

Voted to commend J. Frank Harris and William A. Wood for their report on the AMA Congress of Medicine and Pharmacy held in Chicago, March 12-13, 1964.

Voted to recommend to Council that a study committee be appointed to review the redistricting of councilor districts.

Approved: Certificate of Appreciation for W. L. Pomeroy, Waycross.

Deferred until Organizational meeting: American Association of Medical Assistants request for Advisory Board Appointment.

Council/May 2, 1964

Accepted for information: A committee is being appointed to study the Woman's Auxiliary Constitution and Bylaws, a possible recommendation on dues increase, and the possibility of a part-time secretary.

Received: Legislative Report—Washington trip and luncheon for Georgia members of Congress, and S.B. 190 creating a Georgia State Scholarship Commission.

Referred to Council for decision: Negro membership in county medical societies.

Adopted: Amendment in Association Constitution to conform to changes in the Bylaws of AMA to provide for affiliate membership in MAG.

Adopted: Resolution concerning self-employed individuals tax retirement act.

Referred to Executive Committee: Request to form a county medical society to be known as Cook-Berrien County Medical Society.

Council Organization Meeting/May 6, 1964

Elected: Addison W. Simpson, Chairman of Council; Walter R. Brown, Vice Chairman of Council.

Voted to reappoint Edgar Woody, Jr., as Editor of *JMAG*.

Appointed: Charles R. Andrews, Chairman of the Finance Committee with Charles E. Bohler and W. Frank McKemie as members.

Reappointed: as Treasurer for 1964-65—John S. Atwater; Mr. Milton D. Krueger as Executive Secretary of MAG, 1964-65.

Appointment to American Association of Medical Assistants to be left to Dr. McDaniel.

Voted to have MAG attorney investigate procedure for nominating an additional Councilor and Vice Councilor for county medical societies with over 1,000 membership.

MEDICAL STUDENTS IN THE OFFICE

John L. Moore, Jr., *Atlanta*

QUESTIONS have been asked about the employment during the summer of a senior medical student as a preceptor. Obviously, such a senior medical student can be of use to the physician. More importantly, the physician who employs such a senior medical student is providing important medical education to the student.

Basic Principles

Two basic principles are involved here. (1) The senior medical student, not being a licensed medical doctor, may not practice medicine, and the physician who employs him may not practice medicine through him as an employer; and (2) the physician employing the senior medical student has full legal responsibility to the patients for all acts of the medical student.

However, it is perfectly proper for a professional man to provide instructions to professional students in this form. Our law office, and many similar legal firms, employ "summer boarders" to do research for us.

Practical Pointers

The following seem to be practical pointers in the management of preceptors:

(a) At no time should the preceptor have direct responsibility for diagnosis or treatment or for giving advice to patients;

(b) All acts of the preceptor should be carefully reviewed by the physician employing him;

(c) No procedure should be performed by the preceptor on a patient, even of the most minor nature, unless in direct assistance to the physician. Serious questions of malpractice have been raised in cases where nonprofessional personnel or paramedical personnel were permitted by medical doctors to give shots, draw blood, and to perform other minor procedures.

(d) While there is no law in Georgia protecting the confidential relation between physician and patient as privileged, there is the ethical requirement on a medical doctor not to allow disclosure of confidential information to nonprofessional persons. However, if a secretary, or a nurse, or a preceptor acts as a member of a team with the medical doctor in securing confidential information, the privilege is not destroyed unless the professional or nonprofessional person should improperly divulge confidential information to persons who are not members of the team.

Subject to the above observations, it seems that a preceptor could, under the direct supervision of the physician, assist him in taking medical histories, in the performance of routine laboratory tests, and in research. All of the preceptor's work should be carefully reviewed by the employing physician who is legally responsible to his patients as if he had performed all of the work himself.

Malpractice Coverage

One additional suggestion should be made. Undoubtedly, each physician employing such a preceptor has malpractice insurance. It is possible that the terms of the policy may mention the extent to which the physician may use nonprofessional personnel either directly or by implication. Obviously, it would be very unwise for the physician to use a preceptor at all or in any way which might have the effect of voiding insurance. For this reason, the physician who intends to employ a preceptor should have his legal counsel review the terms of his insurance policy and, if necessary, correspond directly with the insurance company affording the coverage.

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C&S Bank Building

Prepared at the request of The Medical Association of Georgia. Mr. John L. Moore, Jr. is a member of the firm of Alston, Miller & Gaines, general counsel to The Medical Association of Georgia.

ABSTRACTS BY GEORGIA AUTHORS

Foster, G. R., Jr., M.D., McDonough, Georgia, "The Crisis in General Practice," J.A.M.A. 187:797-800 (Mar 14) 64.

The premise is presented that general practice needs not so much to be preserved as rebuilt. The need for first-line medical care continues. But the nature of the need has changed and will continue to change. The challenge is directed to the leadership of organized medicine to recognize and interpret the changes and meet the new needs with new and positive approaches. The beginning point must be in education. It is there that our patterns of practice as well as scientific knowledge are spelled out and imprinted upon those who will practice tomorrow's medicine. Failure to meet this challenge will do disservice to the profession as well as the public. To meet it adequately may do more to reserve the control of medical practice to the profession than all the time and substance that have been thus far spent in legislative efforts.

Hein, David E., M.D., 340 Boulevard N.E., Atlanta 12, Georgia, "Ileocolitis: A Clinical Study," Am. J. Gastroenterol. 41:151-157 (Feb) 64.

Recent attention has been focused on a small number of patients with non-specific inflammatory disease of both the ileum and the colon. The author reports his clinical experience with seven such cases. The characteristic pathology is primarily a granulomatous disease. Classification includes both synchronous or primary ileocolitis and metachronous or postoperative ileocolitis. The severity of the disease depends chiefly upon the extent of small bowel involvement. It occurs at an early age, has a low incidence of gross bleeding although anemia is a frequent finding. Ileocolitis is a disease of early complications especially anorectal disease and enteroenteric fistulas. Roentgenologic examination, particularly barium enema is the most important diagnostic tool. Characteristic colon changes are: Predominant right sided involvement, skip all as with normal bowel in between longitudinal ulcerations, transverse fissures, internal fistula and stricture formation. Treatment is initially medical and includes chemotherapy, steroids and supportive measures. All but two patients required steroids and best results follow vigorous therapy with slow decrease in dose and prolonged maintenance. Surgery is reserved for complications. Six patients had surgery at least one time, and two patients have had two or more operations. Of the four patients operated without prior medical treatment, three have been difficult to manage and the fourth had only an exploratory without resection or anastomosis. Therefore early diagnosis, vigorous medical therapy and critical follow-up should result in better control of this disease.

Gotts, L. L., M.D. and T. F. Sellars, Jr., M.D., 1293 Peachtree Street, N.E., Atlanta 9, Georgia, "Sodium Oxacillin for Primary Staphylcoccal Pyodermas," J.A.M.A. 187:81-84 (Jan 11) 64.

Antibiotics are frequently employed in the therapy of staphylococcal pyodermas, yet evidence that the lesions are benefited has never been confirmed by controlled studies. Comparison of oral sodium oxacillin and placebo therapy for staphylococcal pyoderma was made in 41 patients, by means of a random doubleblind technique. Routine therapy, including moist heat, incision, and drainage, was employed in every case. In an evaluation period of seven days, all patients receiving sodium oxacillin were significantly improved; about two-thirds of the patients showed a satisfactory response while on placebo therapy. Fewer new lesions developed during the regimen of sodium oxacillin. The high incidence (33%) of penicillin-resistant staphylococcal infections encountered in this out-patient study points up the value of penicillinase-resistant penicillin when antibiotics are used.

Briggs, A. P., M.D.; Thomas Findley, M.D. and W. B. Harms, M.D., Medical College of Georgia, Augusta, Georgia, "Further Observations on the Renal Production of Acid in Uremia," Metabolism 13:107-115 (Feb) 64.

Uremic patients and normal controls have been studied over a period of several days on a controlled acid-producing diet, but without acid loading. Our results show no significant difference between the two groups in excretion of either K+ or net proton. Replacement of plasma HcO_3 by H_2Po_4 + So_4 seemed to offer the best explanation for the acidosis in the uremic subjects.

Goodrich, Isaac, Med. Student, and W. S. Harms, M.D., Medical College of Georgia, Augusta, Georgia, "Synthesis of Endogenous Cholesterol in Experimental Nephrosis," Metabolism 13:141-151 (Feb) 64.

To further elucidate the mechanics of hypercholesterolemia in the nephrotic syndrome, various tissues of rats with aminonucleoside-induced nephrosis were examined for incorporation and/or turnover rates of cholesterol formation following intraperitoneal injection of labeled precursors. The experiment was divided into three parts. (1) Serum cholesterol formation from sodium acetate-C^{14} at various time intervals: results indicate increased formation of cholesterol in the early stages of nephrosis. (2) Synthesis and deposition of cholesterol in various body tissues: during the mid-stage of acute nephrosis tripalmitin-C^{14} is utilized for the synthesis of both cholesterol fractions more efficiently than is acetate-C^{14} in certain nephrotic and normal tissues. Nephrotic rats exceed control animals in the ability of the skin and liver to utilize tripalmitin in cholesterol synthesis. (3) Cholesterol turnover in the skin utilizing acetate-C^{14}: in nephrotic rats cholesterol and cholesterol esters have shorter half-lives than in normal counterparts. It is suggested that both the liver and skin may contribute to nephrotic hypercholesterolemia.

Bennett, Robert L., M.D., Warm Springs, Georgia, "Medical Advances Influencing the Field of Orthetics," Arch. Phys. Med. & Rehab. 44:531-532 (Oct.) 63.

The recent interest in research and development in the field of orthetics reflects the demand by physicians for more effective control of impairment and disability in patients with potential or existing physical handicap. Full acceptance of the concept of applying functional orthetic devices for recovery of neuromuscular function, as well as the prevention of musculoskeletal deformity, was in great part due to the demands of the after-effects of poliomyelitis and the survival of the quadriplegic patient following cervical cord injury. Fortunately, orthetic devices developed for the care of these two great problems have the capacity to assist recovery, limit impairment, and modify disability in many other less dramatic conditions. Because of the requirements of these patients the finest orthetic programs that we have today were either initiated or greatly expanded. It is interesting to realize that most of our advances in orthetics leading to greater functional capacity of the paralyzed upper extremities came after the discovery of the polio vaccine. The decline in incidence of poliomyelitis permitted and encouraged research groups in orthetics to look at the problems in other neuromuscular-musculoskeletal diseases. Particularly stimulating is the increased interest in arthritis, the increased interest and incidence of hemiplegia following cerebral vascular accidents, and the multiple physical problems of birth defects and birth injuries.

Yobs, Anne Roof, M.D., Leonard Brown, M.D., and Elizabeth F. Hunter, M.S., 1600 Clifton Road, N.E., Atlanta 22, Georgia, "Fluorescent Antibody Technique in Early Syphilis," Arch. Path. 77:220-225 (Feb) 64.

Procedures for fluorescent antibody staining of *Treponema pallidum* in tissue smears and sections by direct and indirect methods are presented in detail. Fluorescent antibody staining is specific, technically simple, and reproducible. These aspects, as well as economic considerations, of this procedure are compared with classic methods used to demonstrate this organism. Photomicrographs are included.

Steinhaus, John E., M.D., Ph.D.; William Bevan, Ph.D.; Sam C. Webb, Ph.D.; and W. R. Thompson, Jr., B.S., 36 Butler Street, S.E., Atlanta 3, Georgia, "Evaluation of Analgesics by the Rating of Patient Behavior," Anesthesiol. 25:64-70 (Jan-Feb) 64.

Analgesic drugs were evaluated in postoperative patients by rating different categories of patient behavior. These ratings appeared to be more sensitive than the patient's verbal response which was determined concomitantly. A difference in the effectiveness of the analgesics tested was indicated. Although the analysis does not show significant differences between the low potency analgesics, the ranking suggest that they could be differentiated with larger numbers of patients. Rating scales for patient behavior can be adapted to measure other responses to drugs which do not have readily available parameters for measurements.

DEATHS

L. MINOR BLACKFORD, distinguished Atlanta heart specialist, died May 5, 1964, in an Atlanta hospital after a six weeks illness.

Aside from his professional writing, Dr. Blackford was author of *Mine Eyes Have Seen the Glory,* published by the Harvard University Press. It was a biography of his grandmother, Mary Berkeley Blackford.

Dr. Blackford had more lately completed and illustrated another book about the Civil War, based on the journal and letters of a soldier under Jeb Stuart. Recently he addressed the Atlanta Civil War Round Table on Stuart's role at Gettysburg.

Dr. Blackford's interests and experiences were unusually broad. He was for a month in 1945 in charge of a German camp of 16,000 Russian prisoners of war, after seeing service as a major in North Africa and Southern France.

One of more than 50 medical papers he wrote dealt with the heartbeat of crocodiles. For his writing on medical topics he several times received the Fischer award for outstanding presentations.

He attended the University of Virginia and its medical school, graduating there in 1923. He interned at Johns Hopkins and at Mayo's. He was a member of All Saints Church, and served on its vestry. He was a member of the Delta Kappa Epsilon fraternity and the Phi Chi medical fraternity.

He was associate editor of the *Journal of the Medical Association of Georgia* from 1929 to 1942, and editor of the Southern Surgeon, 1932-42. He was active in the founding of the Atlanta Graduate Medical Assembly, and an associate member of the faculty of Emory University. He was a charter member and past president of the Atlanta Clinical Society. He was a fellow in the American College of Physicians.

Dr. Blackford was unmarried. Surviving are a brother, the Rev. Randolph Blackford, St. Petersburg, Fla., and several nieces and nephews, including Mrs. Marvin McClatchey and Staige D. Blackford, Atlanta.

HORACE GREELY JOINER, Douglas, died April 30, 1964, following an extended illness. He was 44.

A native of Butler, he attended the University of Georgia and was graduated from the Medical School in Augusta. He interned at Hillman Jefferson Hospital in Birmingham, Alabama, and had graduate training in surgery at City Hospital in Pensacola, Florida.

Dr. Joiner was a member of the American Association of General Practice and American Medical Association, as well as state and local groups.

A member of the First Methodist Church Board of Stewards, he was also a Mason, Elk, and member of the Douglas Country Club.

Surviving are his wife, Mrs. Hazel Joiner; two sons, Horace Greely "Gree" Joiner, Jr. and Al Joiner, and his mother, Mrs. T. B. Joiner, Butler.

Prominent Augusta physician, CHARLES M. MULHERIN, died at University Hospital May 14, 1964. He was 54 years old.

A 1933 graduate of the Medical College of Georgia, Dr. Mulherin took post graduate residency training at University Hospital, Augusta; St. John Gaston Hospital, Memphis, Tennessee; Bellevue Hospital, New York, N.Y.; and John Sealy Hospital, Galveston, Texas.

Dr. Mulherin was a diplomat of the American Board of Obstetrics and Gynecology, chairman of the Obstetrical and Gynecological Department at St. Joseph's Hospital and clinical professor at the Medical College of Georgia.

He was a past president of the Richmond County Medical Society and held memberships in the Willard R. Cooke Obstetrical and Gynecological Club of Galveston, Texas, the American Medical Association, Georgia State Obsterical and Gynecological Society, South Atlantic Association of Obstetricians and Gynecologists and the American Academy of Obstetricians and Gynecologists.

In addition to publishing scientific papers in state and national medical journals. Dr. Mulherin was a member of the State Infant and Maternal Mortality Committee.

He was a member of Knights of Columbus, Augusta Assembly, Rotary Club and Augusta Country Club. He served as a major in World War II.

Survivors are his wife, Mrs. Pauline Slay Mulherin; two daughters, Mrs. William Townsend Barron of Wateree, S. C., and Miss Julia Butler Mulherin of Augusta; two sons, Charles M. Mulherin, Jr., and Donald Slay Mulherin of Augusta; two brothers, Dr. Phillip A. Mulherin and Dr. William A. Mulherin, Jr., both of Augusta; also two grandsons, William Townsend Barron, III, and Mark Slay Barron of Wateree.

SOCIETIES

THOMAS-BROOKS COUNTY MEDICAL SOCIETY met June 18, 1964, at Archbold Memorial Hospital, Thomasville. Prior to a dinner dance given at the Glen Arven Country Club, an afternoon scientific program was presented by Woodfin Cobb, M.D., Department of Medicine and Cardiology, Archbold Memorial Hospital, and Charles Hatcher, Department of Thoracic Surgery, Emory University, Atlanta. The program outlined recent medical and surgical advances in the treatment of acquired heart disease, especially the use of the pace maker and artificial valves, and aneurysm and peripheral vascular disease.

PERSONALS

First District

No news submitted

Second District

One new medical specialist has settled in Tifton and

two others will arrive this month. FRED L. NELSON will be full time radiologist at Tift County Hospital, JOSEPH M. TURNER, a native of Ashburn, and JAMES KIRKPATRICK, Atlanta, will practice internal medicine and surgery, respectively.

Third District

No news submitted

Fourth District

The Pine Mountain Chamber of Commerce honored two of that city's physicians at a meeting held May 19. W. P. ELLIS, 84, who has been Pine Mountain's only doctor during 35 years of practice, was presented an engraved watch and cash for purchasing fishing tackle and bait; Dr. Ellis is widely known for his fishing. K. D. McMURRAIN has established residence in Pine Mountain and is using the office vacated by Dr. Ellis. The Chamber of Commerce presented him with a gift basket of products from the Gardens Country Store.

Fifth District

ADDISON DUVAL, Atlanta, of the State Department of Public Health addressed the Atlanta Association for Retarded Children May 20 at Fairhaven School Auditorium. Dr. Duval has recently been elected Vice President of the American Phychiatric Association.

BRUCE LOGUE was guest speaker at the anual meeting of the King's County Academy of General Practice in Seattle, Washington. The title of his talk was "Clues in the Recognition of Coronary Disease."

Attending a meeting on "The Biologic Aspects of Aging of the Skin," at the Oregon Region Research Center in Portland, Oregon, May 7-11, 1964, was MARY LOU APPLEWHITE of Atlanta.

SIDNEY OLANSKY, accompanied by MARION OLANSKY, was the honored guest at the May Arkansas State Dermatology Meeting, where he addressed the group on the "Sing Sing Study," and participated in the case presentations and discussions.

FLOYD R. SANDERS, JR. attended the meeting of the Medical Association of Georgia in the capacity of Councilor.

M. VIRGINIA TUGGLE, THOMAS Q. SPITZER, M. FREEMAN SIMMONS, H. H. BUTTERWORTH and EARNEST C. ATKINS served as Delegates from DeKalb County to the Medical Association of Georgia annual meeting.

ROBERT M. FINE and GLENN McCORMICK attended the meeting of the Georgia Dermatologic Association held in Macon, May 5. Dr. Fine also attended the meeting of the Arkansas Dermatologic Society May 9 and 10 in Little Rock, Arkansas.

MALCOLM D. LOCKHART, JOHN T. LESLIE and WILLIAM J. BRANAN, JR. attended the scientific sessions of the Medical Association of Georgia meeting in Macon.

Sixth District

No news submitted.

Seventh District

A panel discussion concerning cancer, in which several Dalton physicians participated was featured at a recent meeting of the Pilot Club of Dalton. Contributing to the panel were EARL McGHEE, professional Vice President of the Whitfield County Chapter of the American Cancer Society; MURRAY LUMPKIN, surgeon; DAVID NOWELL, gynecologist; and EVELYN STEPHENSON, pathologist.

TOM HARBIN of Rome has been appointed Delegate for the State of Georgia to the National Medical Foundation for Eye Care by the Georgia Society of Ophthalmology and Otolaryngology.

Eighth District

No news submitted.

Ninth District

BILLY S. HARDMAN, Gainesville, has been elected a trustee of the Medical College of Georgia Foundation, Inc. He was installed during a meeting of the organization May 3 in Macon.

Canton physician, ROBERT T. JONES, III, announced the closing of his office on June 1, 1964.

HENRY S. JENNINGS, JR., Gainesville internist, was recently elected Vice President of the Georgia Heart Association at its 16th annual meeting in Atlanta.

Tenth District

A former Kingsland physician, ROBERT B. CRICHTON, was recently welcomed to Savannah Beach as its new doctor. Savannah Beach has long been seeking a doctor for their area, and the Savannah Beach Boosters Club perusaded Dr. Crichton to make the move.

CAROL PRYOR, Augusta, State President of the American Association of University Women, was guest speaker at the Bainbridge Branch luncheon meeting of the Association held May 23. Dr. Pryor's subject was "The College Woman in Today's World."

THE WAYS OF PROPAGANDA

What the pharmaceutical industry has spent defending itself in Washington and other parts of the world the last four years, in terms of manpower and money, is staggering. What started out as differences of opinion between our industry and some government investigating committees has now become the source of distorted international propaganda—not so much anti-drug industry as it is anti-American. — Philip B. Hofmann, Chairman of the Board, Johnson & Johnson, to National Association of Chain Drug Stores, Washington, D.C., October 17, 1963.

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA

Name	*Address*	*Classification*	*County Society*
Allen, Lawrence L.	211 E. Thompson Street Thomaston, Georgia	Active	Upson
Bowman, John R.	VA Center Dublin, Georgia	Service	Laurens
Bozzo, Alfred R.	2795th USAF Hospital Robins Air Force Base Warner Robins, Georgia	Service	Peach Belt
Bridges, Henry B.	Medical College of Georgia Augusta, Georgia	Active	Richmond
Buxton, Hubert, Jr.	781 Spring Street Macon, Georgia	Active	Bibb
Cooper, Floyd C., III	Emory University Dept. of Psy. Atlanta, Georgia 30322	Active	Fulton
Cooper, James Thomas	Byromville Clinic Byromville, Georgia	Active	Flint
Cross, James Lee	57 Sixth Street Atlanta, Georgia 30309	Active	Fulton
Crovatt, Joseph G.	VA Center Dublin, Georgia	Service	Laurens
Dallas, William M., Jr.	118 E. Thompson Street Thomaston, Georgia	Active	Upson
Fernandez, Luis, Jr.	VA Center Dublin, Georgia	Service	Laurens
Fioranelli, Raymond J.	Flight Surgeons Office Robins AFB, Georgia	Service	Peach Belt
Garner, James Wm.	5914 Love Street, S.W. Austell, Georgia	Active	Cobb
Glover, Odis G.	2732-B Felton Drive East Point, Georgia	Active	Fulton
Gomez, Miguel R.	300 Boulevard, N.E. Atlanta, Georgia 30312	Active	Fulton
Goodwin, Franklin H.	VA Center Dublin, Georgia	Service	Laurens
Grundset, Harold M.	Burleyson Drive Dalton, Georgia	Active	Whitfield
Hendricks, Charles M., Jr.	VA Center Dublin, Georgia	Service	Laurens
Jackson, Billy J.	Medical College of Georgia Augusta, Georgia	Active	Richmond
Josey, William E.	69 Butler Street, S.E. Atlanta, Georgia 30303	Active	Fulton
Klotz, Hugh A.	340 Boulevard, N.E. Atlanta, Georgia 30312	Active	Fulton
Lawrence, James D.	645 First Street Macon, Georgia	Active	Bibb
Mitchell, Otis C.	300 Boulevard, N.E. Atlanta, Georgia 30312	Active	Fulton
Nadal, Guillermo	DeKalb General Hospital Decatur, Georgia	Active	DeKalb
Nelson, George H.	1409 Ranch Drive Augusta, Georgia	Active	Richmond
Oller, Joseph L.	University Hospital Augusta, Georgia	Active	Richmond
Ortega, Louis G.	Emory University Hospital Atlanta, Georgia 30329	Active	Fulton
Park, Ernest L., Jr.	2728 Shallowford Road Chamblee, Georgia	Active	DeKalb
Price, Thomas Watson	Byromville Clinic Byromville, Georgia	Active	Flint

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA (Continued)

Name	*Address*	*Classification*	*County Society*
Richardson, Arthur P.	Emory Univ. Sch. of Med. Atlanta, Georgia 30322	Active	Fulton
Souval, Paris A.	2415 Fairburn Road, S.W. Atlanta, Georgia 30329	Active	Fulton
Sowell, Raymond H., Jr.	11 College Avenue Statesboro, Georgia	Active	Bul.-Cand.-Ev.
Steagall, Robert W.	1349 Druid Park Avenue Augusta, Georgia	Active	Richmond
Stevenson, Onex D.	203 Houston Road Warner Robins, Georgia	Service	Peach Belt
Tanner, Terrell B.	Medical Building Hartwell, Georgia	Active	El.-Fran.-Hart
Vanburen, James Knox	80 Butler Street, S.E. Atlanta, Georgia 30303	DE2	Fulton
Viera, Max	324 Baptist Professional Bl. Atlanta, Georgia	Active	Fulton
Whelan, Edward J.	2113 Bull Street Savannah, Georgia	Active	Ga. Med. Soc.
Wildstein, Walter B.	1285 Peachtree Street, N.E. Atlanta, Georgia 30309	Active	Fulton

NINETY PER CENT OF NEW DRUG DISCOVERIES COME FROM PHARMACEUTICAL INDUSTRY

New information was recently made available on the sources of key drug discoveries in the United States. According to a study of the origins of 365 basic new drugs introduced since 1941, more than 90 per cent came from the pharmaceutical industry; about nine per cent came from universities and state institutions, and less than one per cent came from the federal government. The study was made by the Pharmaceutical Manufacturers Association.

Information Presented

The information was presented to the House subcommittee on intergovernmental relations by Austin Smith, M.D., president of the Pharmaceutical Manufacturers Association. The association had testified April 8, and Chairman L. H. Fountain (D.-N.C.) invited PMA to return to present more information and answer questions.

Dr. Smith praised the work of the federal research agencies in the search to unearth fundamental new information about drugs. He said 1962 federal programs in this area amounted to almost $71 million, according to NIH, while the drug industry's research spending that year was $238 million. He favored frequent contacts between government and industry scientists, saying they are of real mutual value, though no specific drug has come of them to date.

As examples of current government-industry cooperation, he described the massive National Cancer Institute cancer screening program and noted that drug firms donate most of the substances NCI screens. He said other joint ventures include collaboration on drug research to combat mental illness and to develop common cold vaccines.

Turning to other matters, Dr. Smith called the subcommittee's attention to "inconsistent" attitudes in the FDA with respect to the effect public opinion might have on its actions; he expressed the industry's hope that FDA will reply on objective scientific evidence in forming its decisions.

Class Discussed

A proposal to put new drugs under a special probationary class was discussed in the PMA testimony. Dr. Smith said the scheme was not indicated in view of adequate available means of emphasizing special cautions applicable to a new drug when that is needed. Further, he said, extremely stringent FDA reporting requirements exist for new drugs, especially during the early years of their use. He expressed the hope that the legal and administrative powers given to FDA under the 1962 Drug Amendments would be given a chance to work before any additional legislative actions are taken.

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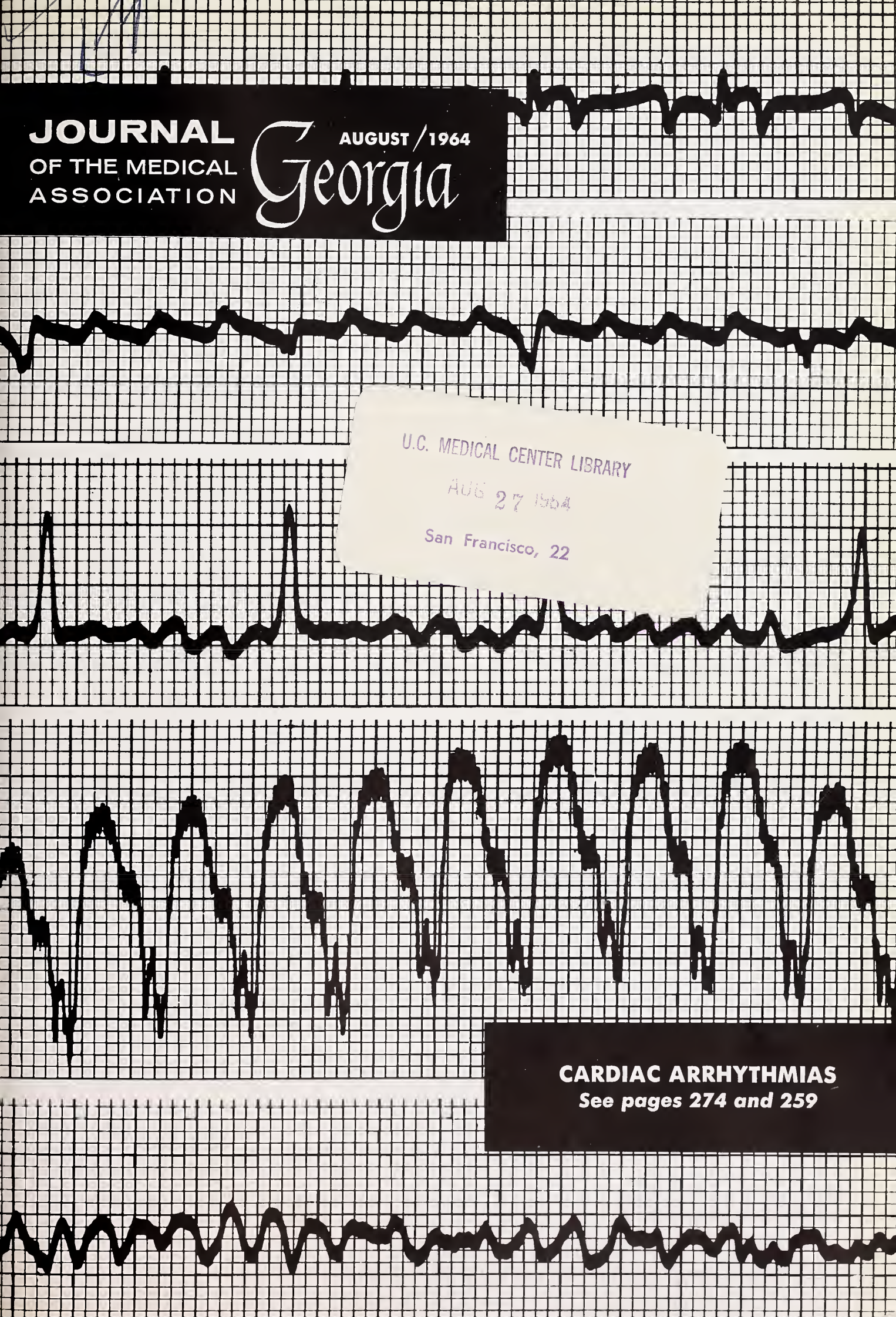
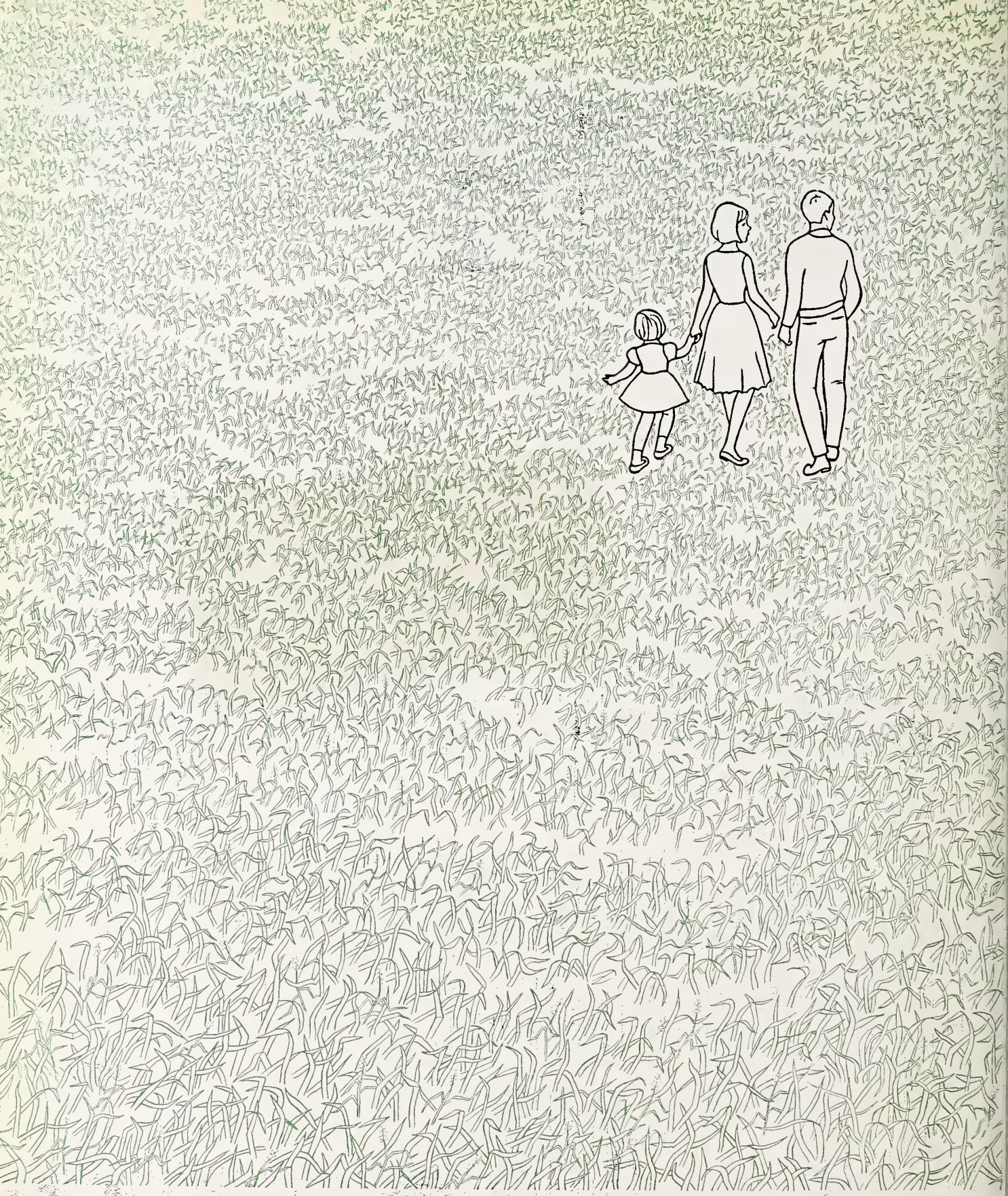


CARDIAC ARRHYTHMIAS

See pages 274 and 259



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ECG tracings of cardiac arrhythmias from the Department of Medicine and the Department of Medical Illustration, Emory University School of Medicine, Atlanta.

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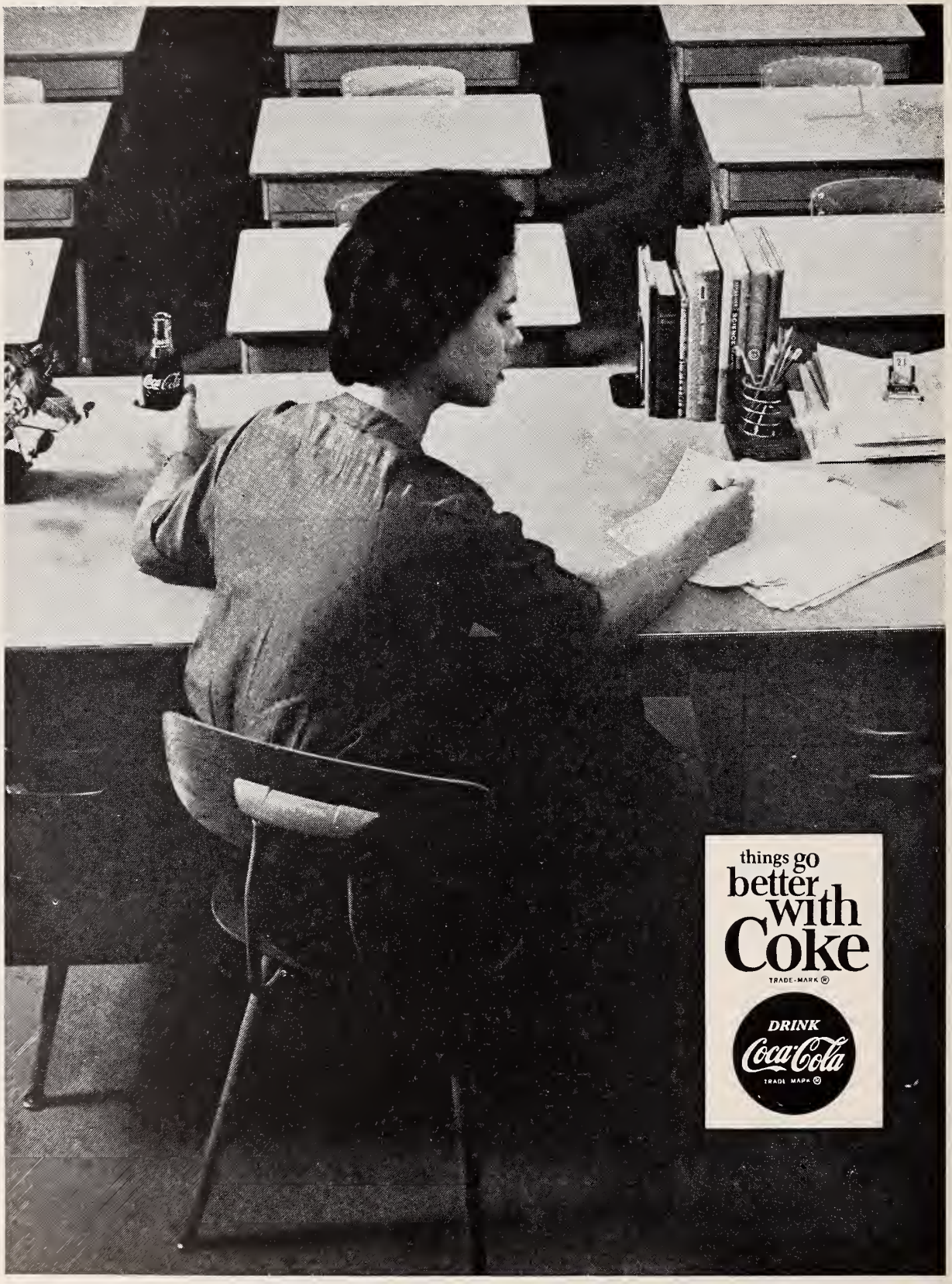

Whether you're a teacher correcting exams.
A student cramming for them. A housewife
cleaning up after the kids. Or a businessman working
late at night. Whoever you are, things go better
when you pause and refresh with ice-cold Coca-Cola.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

MEDICAL CARDIAC ARREST IN A COMMUNITY HOSPITAL

W. D. Stribling, III, M.D., *Gainesville*

■ ***Remarkable results can be achieved in a community hospital without an intern and residency program when adequate training is given to available personnel.***

In recent years many advances have been made in management of patients with cardiac arrest. The pioneer work of Dr. Claud Beck[1-2] and associates pointing out the concept of sudden death due to "electrical instability" secondary to anoxia is well known. The concept of hearts "too good to die" has led many to work toward a method of resuscitation that did not require open-chest massage and internal defibrillation.

Transverse Route

In 1956 Zoll et. al[9-10] reported for the first time successfully defibrillated human hearts with the use of an electric countershock sent transversely through the chest. This was followed rapidly by the development of closed-chest massage by Kouwenhoven et. al.[5-6] This technique, for the first time, gave the clinician a practical and greatly simplified method of maintaining cardiac output and cerebral oxygenation until such time as external defibrillation could be carried out with restoration of the circulation.

The physiologic adequacy of the closed-chest massage and positive pressure respiration has been proven by many investigators.[4] Papers have appeared frequently reporting on the success of the method and literally hundreds of lives have been saved.

Many hospitals have set up programs for the management of patients with cardiac arrest,[8] and elaborate coronary care units have been devised utilizing specially trained personnel and even closed-circuit television monitoring systems. Most such units have been instituted in fairly large hospitals with active intern and residency training programs.

In November, 1961, the Hall County Hospital purchased a Hopkins closed-chest AC defibrillator (Figure 1) and all physicians on the staff were instructed in the method of external-cardiac massage, mouth-to-mouth resuscitation, and external defibrillation. The Hall County Hospital is a general medical and surgical hospital without an intern or residency training program. This hospital has 150 beds and is in a town of 25,000 population with a medical referral area of approximately 150,000 people. It soon became apparent to all concerned that the physician could not always be nearby when cardiac arrest occurred. It was for this reason that we began to develop a training program for hospital personnel so that qualified people would be available on a 24-hour basis. Movies, lectures, and practical demonstrations were held. Resusci-Anne, a manikin available through the Smith, Kline and French Laboratories, was utilized for demonstration of external massage

Figure 1
Hopkins AC Defibrillator

Presented at the 110th Annual Session of the Medical Association of Georgia, May 5, 1964, Macon, Georgia.

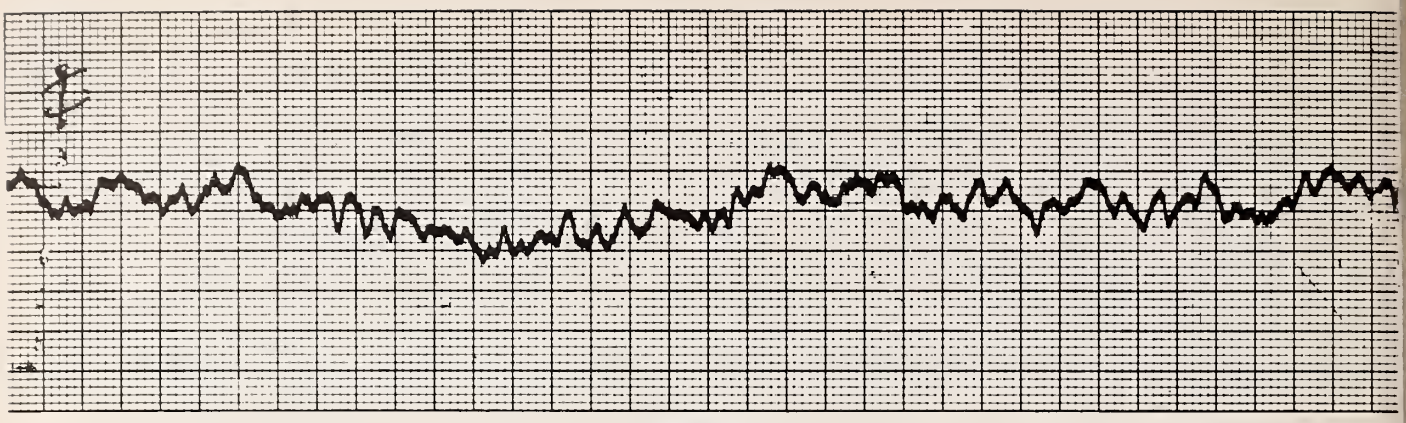

Figure 2
Ventricular fibrillation

and mouth-to-mouth resuscitation and was invaluable to us in this program. We have been gratified and amazed at the ease with which our graduate nurses, licensed-practical nurses, and student nurses have grasped the principle of diagnosis of cardiac arrest and the skill with which they have been able to carry out closed-chest massage and mouth-to-mouth or mouth-to-airway resuscitation. We have had several instances where successful external defibrillation and restoration of the circulation have been accomplished when the physician was not readily available. The nurses are taught to immediately begin external massage and positive pressure respiration and to continue same until the physician arrives. They, under no circumstances, administer drugs or carry out external defibrillation, but are taught to have the necessary equipment available for the physician when he arrives. The critical time interval of three minutes has been adequately impressed upon all personnel and so far we have had no incidents where attempts at resuscitation were carried out in patients past this critical time period.

Since equipment has been available in the Hall County Hospital we have attempted cardiac resuscitation in 12 patients. The majority of these patients were admitted for treatment of coronary artery disease. Ten of these patients had been admitted with the diagnosis of myocardial infarction, one patient with rheumatic heart disease with transient episodes of ventricular tachycardia and ventricular fibrillation, and one patient with ventricular standstill complicating massive pulmonary embolus. All of these patients had electrocardiographic confirmation of ventricular fibrillation prior to external defibrillation and all had their circulation maintained with external cardiac massage and positive pressure breathing prior to external defibrillation. The following is a typical case history:

A.H.: 56-year-old white male admitted to the Hall County Hospital with typical substernal chest discomfort and electrocardiographic changes of an acute lateral wall myocardial infarction. Shortly after admission the patient apparently developed cardiac arrest. External cardiac massage and mouth-to-airway resuscitation were begun immediately. An electrocardiogram, after cardiac arrest, confirmed the presence of ventricular fibrillation (Figure 2). Following external defibrillation with the AC defibrillator, cardiac standstill was produced. External cardiac massage was continued and a sinus rhythm was restored (Figure 3). Five minutes after conversion the patient again developed cardiac arrest due to ventricular fibrillation and was successfully externally defibrillated a second time. This patient remains well and works full time 19 months later.

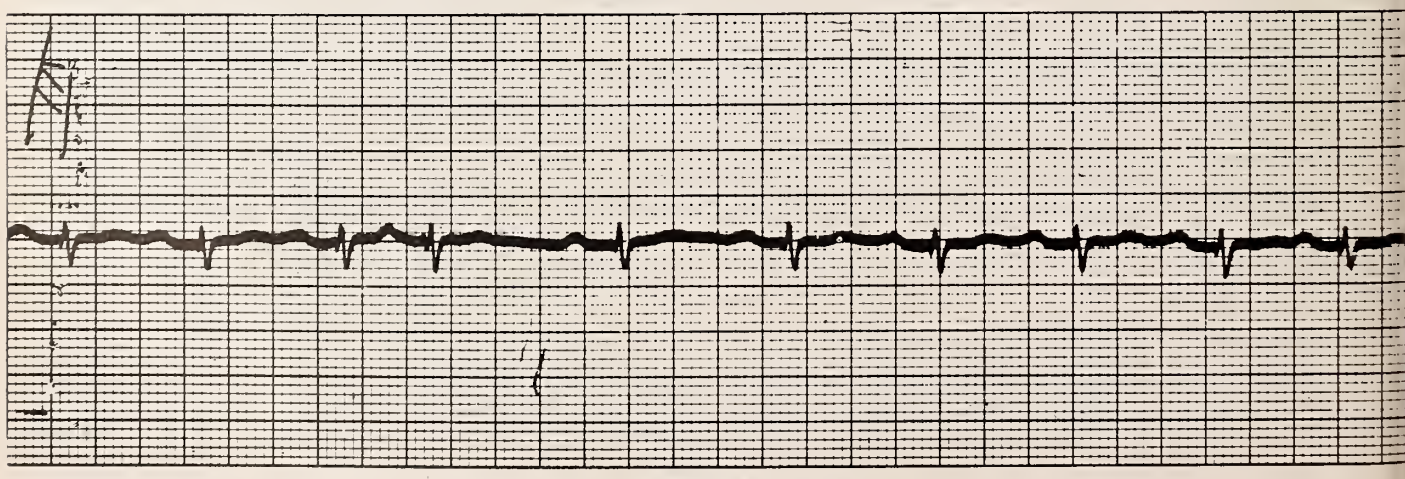

Figure 3
One minute after external defibrillation

In the above case external massage was begun in less than one minute after cardiac arrest occurred. Our experience has confirmed the importance of prompt recognition of the arrest and immediate closed-chest massage and adequate oxygenation. When massage is promptly instituted, the patient will often breath spontaneously, and in one of our cases a state of semiconsciousness could be maintained with cardiac massage during EKG documented ventricular fibrillation. This, however, does not underestimate the importance of artificial respiration by tracheal intubation as soon as possible. The following is a summary of our experience:

Summary of Results

Total number of cases	12
Cases of ventricular fibrillation	10
Cases of ventricular standstill	2
Cases with effective rhythm restored	9
Survival longer than 24 hours	7
Long-term survival	5

Discussion

The low incidence of cardiac standstill in this group was surprising. The small number of posterior-wall infarctions (one) as compared to nine anterior-wall infarctions may be a partial explanation. The second case of ventricular standstill was produced by massive pulmonary embolus and attempts at resuscitation were unsuccessful. Patients with myocardial infarction commonly have ventricular fibrillation as a mechanism of cardiac arrest although ventricular standstill may be responsible. We were greatly surprised that there were not more posterior-wall infarctions in our group.

Serious complications of external massage and external defibrillation have been unusual in our experience. If the technique of massage is properly done, serious complications should be a rarity. Others[3] have reported many complications including fracture of the sternum, pneumothorax, fractured ribs, ruptured liver, spleen and even retroperitoneal hemorrhage. Most of our patients had "sore chests" and separated costochondral cartilages and at least two had definite rib fractures.

One must be mindful of central nervous system damage in these patients. Most will have amnesia for a short period leading up to and following external defibrillation. Only one in our series was confused for any length of time. This patient was well oriented 24 hours after defibrillation but later became confused and remained so for approximately three weeks. He has since cleared and apparently has no permanent brain damage.

It should be emphasized how important the recognition of acid-base alterations are to the patient's well-being. Hypoxia leads to metabolic acidosis which must be corrected early to prevent progression to an irreversible stage. The early use of intravenous sodium bicarbonate is very effective in combating this acidosis. Blood pH determinations, if available, are very helpful and provide a guide for administration of buffer solutions.

Cardiac arrhythmias are very frequent and occurred in all of our patients who were successfully defibrillated. Different degrees of AV block, ventricular tachycardia, auricular fibrillation, flutter, and nodal rhythms are common and must be dealt with promptly. It should be mentioned, however, that the depressing agents such as Quinidine and Pronestyl are totally contraindicated in patients with complete heart block even though they have seizures due to ventricular tachycardia or fibrillation. These agents should also be used in the lowest possible dose in other circumstances because of their effect on muscle contractility. One must be constantly alert to the recurrence of ventricular fibrillation. Eight of our patients required external defibrillation on more than one occasion. We successfully defibrillated the previously mentioned patient with rheumatic heart disease 53 times within a 24-hour period without significant cardiac damage.

The importance of good oxygenation and good external massage prior to attempts at defibrillation cannot be overemphasized. One certainly should not give up easily and it is important to support the ineffective ventricular output with external massage.

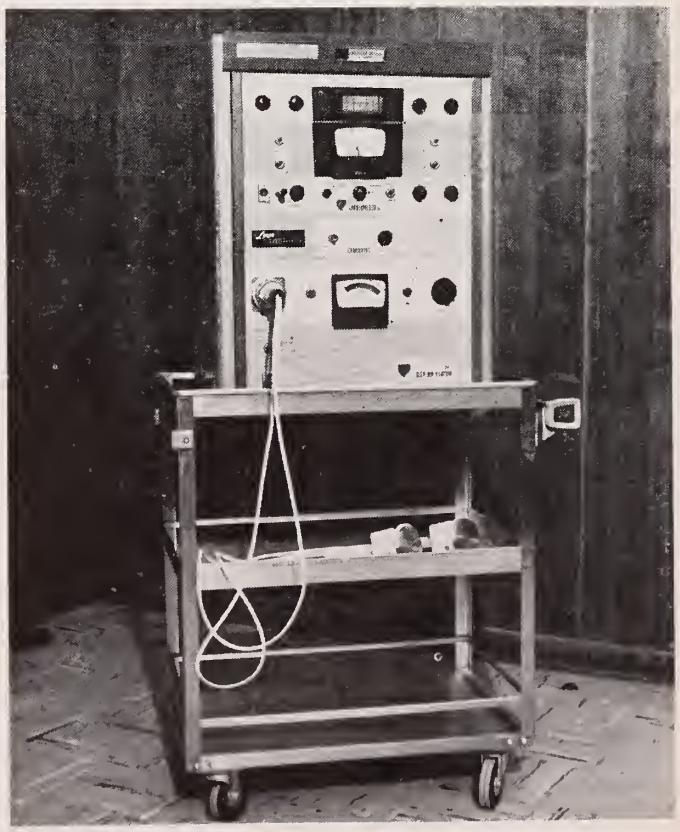

Figure 4
Lown Cardioverter

Vaso-pressor agents should be used and, of course, other drug therapy as indicated.

The recent reports of the superiority of direct current over alternating current for the conversions of ventricular fibrillation and other arrhythmias has led us to the purchase of a Lown cardioverter. This instrument includes within a single unit a cardiometer, defibrillator, and synchronizer (Figure 4). This superior instrument should improve our conversion frequency and simplify the management of refractory arrhythmias such as ventricular tachycardia.

Summary

A cardiac care program in a community hospital without an intern and residency training program is presented. The importance of a pre-determined plan of action is emphasized and results obtained in 12 cases are reported.

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AMA-ERF ANNOUNCES TEN GRANTS FOR TOBACCO RESEARCH

Ten grants for tobacco research—including a project seeking chemical persuaders capable of inducing the body to manufacture cancerfighting weapons—were announced recently by the American Medical Association Education and Research Foundation.

The projects for which grants were approved were the first awarded under the long-range research program on tobacco and health authorized by the AMA House of Delegates last December.

They were selected by the five-member committee of scientists appointed to direct the program for the Foundation. Twenty-seven applications for grants have been received and about 25 more are in preparation.

Those approved include projects to study the action of nicotine on cells, to produce synthetic radioactive nicotine for research, to find more facts on the relationship between cigaret smoking and cardio-pulmonary disease, to study the effects of nicotine on the human heart, to determine how cigaret smoke affects the ability of the lungs to clear foreign particles, to measure the addictive qualities of nicotine, to study the effects of nicotine on heart muscle cells, and to study nicotine as a stimulant or a tranquilizer.

First-year grants for the ten approved projects totaled approximately $340,000. It was emphasized that grant amounts are subject to final review before agreements are drawn up. Duration of the projects will range from two years to five.

The AMA Foundation's tobacco and health research program is financed primarily from a $10,000,000, five-year unrestricted grant from the six major tobacco companies.

AMA MOTION PICTURE CATALOG NOW AVAILABLE

The most complete catalog ever compiled of medical and surgical motion pictures has been published by the American Medical Asociation.

The new book, *Medical and Surgical Motion Pictures*, lists over 3,000 available motion pictures dealing with every phase of the healing arts. Up-to-the-minute listings were made possible through computer processing.

The AMA *Medical And Surgical Motion Pictures* catalog will be an invaluable tool in the training of students, nurses, and graduate physicians. This catalog is aimed at the potential user of films of a professional nature and includes films for personnel in ancillary fields of medicine.

The film listings are divided in three general categories: basic sciences, clinical medicine and surgery, and para-medical sciences. It is then subdivided into some 600 specialty subjects. The films are listed alphabetically under each specialty.

Included with the listing is a brief summary, running time, black and white or color, silent, optical or magnetic sound, year of release, language versions other than English, names of the authors and producers, and the name and the address of the primary rental source.

Present plans call for the catalog to be updated periodically.

The *Medical And Surgical Motion Pictures* catalog is available at the cost price of $5.00 to addresses in the U.S., U.S. Possessions, and Canada; $5.50 to other foreign addresses. Write to the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

USEFULNESS OF PERORAL INTESTINAL BIOPSY IN THE DIAGNOSIS OF TWO UNUSUAL CAUSES OF MALABSORPTION

Hans J. Peters, M.D.
Victor A. Moore, M.D., *Augusta*

■ ***Histologic diagnosis without the necessity of exploratory laparotomy may be achieved in many cases.***

INTESTINAL MALABSORPTION is characterized clinically by diarrhea, steatorrhea, anemia, multiple vitamin deficiences, weight loss, abdominal pain, hypoalbuminemic edema and hypocalcemic tetany, either singly or in combination. One distinguishes between primary malabsorption (sprue states, celiac disease) and the secondary forms (enteritis, enterocolitis, Whipple's disease, lymphoma, sarcoid, jejunal diverticulosis, strongyloidiasis, etc.). Multiple laboratory tests, many of them commonly available, may be employed to confirm the impression of an absorptive defect and to survey various functional parameters. Table I lists those procedures generally employed in the diagnosis of malabsorption.

Simultaneous Examination

The simultaneous examination for excess stool fat, serum carotene level and d-xylose urinary excretion has proved useful for screening purposes; other serum determinations (calcium, albumin, glucose, prothrombin), while nonspecific, are helpful when extra-enteric causes for alterations are excluded, and especially when interpreted in the light of the more specific test results.

Barium contrast X-ray examination of the intestinal tract may reveal the abnormal but nonspecific "deficiency pattern," or demonstrate the more specific changes to which malabsorption may be secondary, i.e., regional enteritis, lymphoma, jejunal diverticulosis. It is not unusual, however, for histologic study to be required in order to distinguish these entities.

The inability to conclusively establish etiology in instances of chronic diarrhea or unexplained weight loss may also require mucosal biopsy.

Biopsy techniques for the small intestines have not been available except during exploratory laparotomy until the introduction of modern instruments such as intestinal biopsy capsules. In our studies the Ross & Moore[1] capsule (Figure 1) was used. This capsule consists of a double walled cylinder, a screw-on cap, and a biopsy port. The cutting portion is a hydrolically powered, cylindrical knife blade, which slides within the inner chamber of the capsule. Application of hydrolic pressure and suction is mediated through an autoclavable, radio-opaque quadrilumen silicone tube, which also permits inflation of an attached balloon when required for bolus, flushing, aspiration, irrigation, and the injection of radio-opaque media. The capsule and tube are swollowed and positioned under fluoroscopic control. Biopsy is effected by successive application of suction to engage mucosa and hydrolic pressure to activate the knife blade. The specimen is then freed of all final attachments by partial withdrawal of the capsule. Repeating these maneuvers allows successive biopsies at more proximal levels as the instrument is removed. Immediately after the withdrawal of the capsule from the intestinal tract the tissue is removed from the capsule, placed on a piece of filter paper and fixed

TABLE I.

LABORATORY TESTS — INTESTINAL ABSORPTION

1. Fat absorption
   a) Microscopic examination of stools stained for fat (useful survey technique).
   b) I^{131} Triolein—Oleic acid (defects steatorrhea and distinguishes digestive from absorptive defects).
   c) Quantitative fecal fat determination (most accurate, least available).
   d) Serum carotene level.
   e) Serum Calcium (hypocalcemia results from poorly absorbed fat soluable Vitamin D and the formation of insoluable soaps with excess intraluminal fatty acids).
2. Carbohydrate absorption
   a) Oral glucose tolerance test
   b) D-xylose excretion
3. Protein absorption
   a) Serum albumin levels
   b) I^{131} polyvinylpyrrolidone (detects excessive albumin loss into the alimentary canal).
4. Vitamins
   a) Vitamin A tolerance curve
   b) Vitamin B12 ($Co^{60}B12$—Schilling test)
   c) Vitamin K (Prothrombin Concentration)

From the Departments of Pathology and Medicine, Medical College of Georgia, Augusta.

Presented in part at the 109th Annual Session of the Medical Association of Georgia, May 5, 1963, Jekyll Island, Georgia.

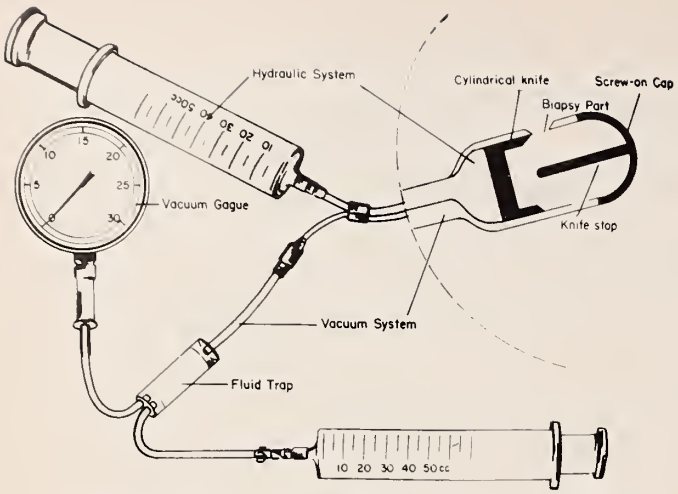

Figure 1
Schematic drawing of operational components of the biopsy capsule (Ross and Moore)

in ten per cent formalin. The usual size of the specimen is about 1.0 x 0.8 cm. in greatest dimension on the surface and extends no further than the muscularis mucosa, depth of the biopsy being manometrically controlled.

Material obtained by this technique allows for excellent histological preparations when properly handled. The pathologist interpreting material obtained by this method must be familiar with the normal and abnormal histological features of the intestinal tract and have knowledge of the clinical, laboratory and X-ray data obtained prior to biopsy.

Peroral mucosal biopsy of the small intestines is of necessity a blind technique and is consequently of principal value in diffuse mucosal disorders. Although simultaneous instillation of radio opaque media may outline discrete localized lesions, exact control over the biopsy site cannot be achieved; therefore, recovery of tissue satisfactory for definitive diagnosis under these conditions is essentially fortuitous.

In this presentation the usefulness of peroral intestinal mucosal biopsy for the diagnosis of two uncommon causes of intestinal malabsorption, i.e., malignant lymphoma and sarcoidosis, is discussed.

Table II

Pt. V. S.

Normal		Jan. '63 Hospital	March '63 OPD
>70 %	Prothrombin Conc.	25% → 80%	--
9 - 11 mg%	Serum Calcium	8.8 → 9.8	--
50 - 200 %	Serum Carotene	70	--
3.2 - 4.1 Gm%	Serum Albumin	3.2	3.8
2.8 - 3.7 Gm%	Serum Globulin	4.4	3.4
10% - 15%	Gamma fraction	23%	--
>5 Gm.	D-xylose excretion	3.8	--

Case One

(ETMH #044-603), Pt. V. S. A 16-year-old single colored male noted left lower chest pain on inspiration, fever and a nonproductive cough of six months duration, which did not respond to the administration of sulfonamides. He was hospitalized elsewhere at which time a mild generalized lymphadenopathy was noted. Laboratory studies then revealed 3+ C-reactive protein, a 36 per cent gamma globulin and diminished serum calcium. Chest X-rays showed a questionable bilateral pleural effusion. Lymph node biopsy revealed chronic granulomatous lymphadenitis, and on this basis, diagnosis of tuberculosis was made. After discharge, he took isoniazid for one month but experienced anorexia and continued to lose weight. One month before admission there was leg swelling, recurrent fever, and pain in the left hip. Laboratory examination revealed a white blood count of 17,000; a serum albumin of 1.2 gm. per cent, globulin 2.8 gm. per cent with 50 per cent globulin. P.P.D. and B/H/C. skin tests were nonreactive.

The physical examination following admission to Eugene Talmadge Memorial Hospital (January, 1963) was essentially within normal limits. Edema was not present.

Laboratory studies (Table II): Hemoglobin 8.7 gms., hematocrit 27 per cent, white blood count 20,800, Differential Count: Neutrophils 71, Bands four, Mono eight, Lymphocytes 13, Metamyelocytes two, Basophiles two, Sickle Cell preparation, febrile agglutinations. ASO, CRP, and three L. E. cell preparations were within normal limits. Sputum cultures for acid fast bacilli were sterile. Fat Content of feces was not increased. Prothrombin concentration was 25 per cent, Serum calcium was 8.8 mg. per cent initially and rose subsequently to 9.8 mg. per cent; serum phosphorus was 5.5 mg. per cent. Serum albumin was 3.2 Gm. per cent, serum globulin 4.4 Gm. per cent with a 23 per cent gamma fraction. D-xylose excretion was 3.8 Grams/five hours and serum carotene level was 70 gamma per cent.

Bone marrow examination showed an increase in plasma cells and was interpreted as being "irritative."

Upper gastrointestinal X-ray series revealed marked thickening of the valvulae of the small bowel without rigidity, flocculation or segmentation of the barium. X-rays of the hands revealed slight demineralization of the bones.

A cervical lymph node biopsy was reported as histologically within normal limits. The biopsy of the deltoid muscle revealed moderate atrophy.

Peroral jejunal and duodenal mucosal biopsies were performed because of the unexplained hypoalbuminemia and abnormal X-ray findings in the

small bowel. The pathological diagnosis was granulomatous inflammation compatable with sarcoidosis involving duodenum and jejunum (Figure 2). A Kveim skin test was placed on the forearm but subsequent biopsy specimen was reported "unsatisfactory." The patient was discharged with no specific therapy.

He was hospitalized again in May, 1963, with the symptoms of almost complete gastric obstruction, demonstrated by X-ray to be located in the distal antrum. Prednisone was administered and dramatic relief and reduction of the obstruction changes occurred.

After discharge from the hospital he has been seen at intervals as an outpatient and while continuing to take prednisone has markedly improved, as evidenced by a weight gain of 13.5 Kg. over a six month period.

This is an unusual case of sarcoidosis; first, because of the way it was diagnosed, and second because the absence of hypercalcemia and elevated serum globulins was not suggestive of the diagnosis. In retrospect, this may be explained on the basis of malabsorption of calcium and protein.

Case Two

(ETMH #031-762). This 58-year-old white female gave a five-year history of edema of the feet and ankles which had become progressively more severe, finally extending to the mid-abdomen. Hypoalbuminemia was noted and she was treated with intravenous plasma producing transient relief of the edema but hypoalbuminemia recurred. Bowel function was normal but abdominal cramps were noted for several weeks. Diagnostic studies prior to coming to this hospital consisted of an upper GI series which revealed only a deformed duodenal bulb. She was admitted to this hospital for the first time in August, 1961.

The physical examination revealed a well-developed, fairly well-nourished, chronically ill-appearing woman who was afebrile. Significant findings consisted of a scaphoid abdomen and mild epigastric tenderness. There was no detectable enlargement of liver, spleen, or lymph nodes. Peristalsis was hypoactive. Mild pretibial edema was noted.

Laboratory studies: Hemogram-normal. D-xylose excretion 3.3 grams per five hours, serum carotene 30 gamma per cent, total serum cholesterol 129 mg. per cent, serum albumin 2.4 gm. per cent, serum globulin 1.4 gm. per cent. Polyvinylpyrrolidone (PVP) six per cent excretion (fecal). Serum calcium 8.1 mgm. per cent. Feces did not contain occult blood and there was no 5-hydroxyindolacetic acid in the urine.

Peroral jejunal biopsy was performed and microscopically revealed marked mucosal atrophy with a dense round cell infiltration.

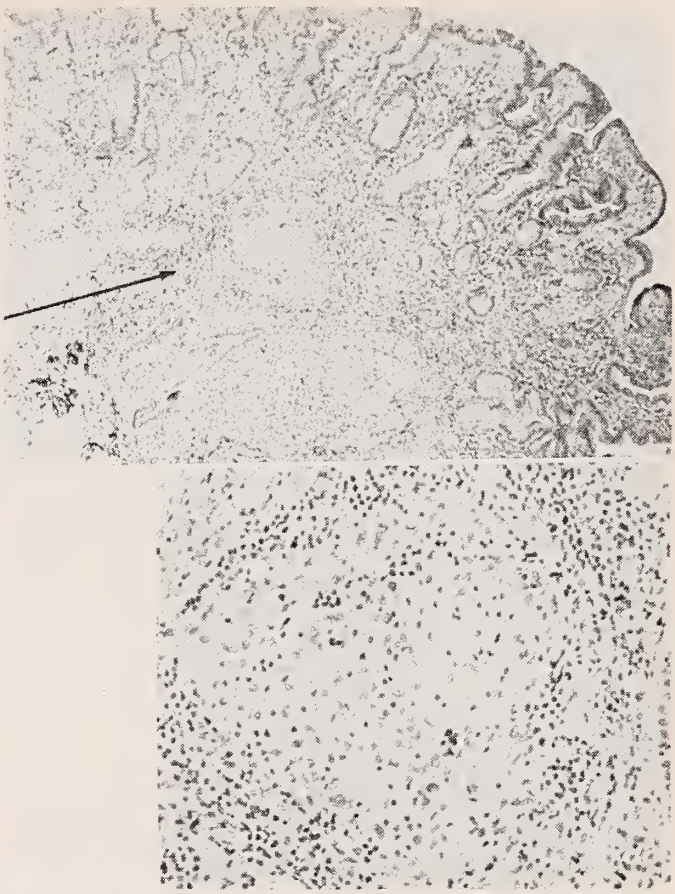

Figure 2. a. Low power and b. higher magnification of jejunal biopsy showing a sarcoid type non caseating granulomatous inflammatory reaction in the lamina propria.

The clinical impression was either primary malabsorption or secondary malabsorption due to lymphoma involving the small bowel.

The patient was given a gluten free diet and responded with some symptomatic improvement. She was discharged and instructed to follow a diet of gluten restriction and to take multivitamin tablets.

Subsequently she experienced some improvement but continued to complain of weakness and abdominal cramps. Weight gain did not occur. An increase was noted in the serum albumen, and carotene levels and gluten restriction with supplemental oral calcium were continued. Following persistence of symptoms and recurrent leg edema, steroid therapy (prednisone, 40 mgm/day) was instituted and complete clinical remission occurred. It was not possible, however, to discontinue steroids without recurrence of symptoms, and after ten months a trial on combined steroid and antibiotic therapy was followed by only a three week asymptomatic period. Clinical remission again occurred following reinstitution of steroids. Because of this atypical response, the patient was readmitted to the hospital in February of 1963, 18 months after the first admission. At that time there had been no weight change; there was no lymphadenopathy and no detectable increase in size of liver, spleen, or kidneys. Hemoglobin was 12.6 Gm

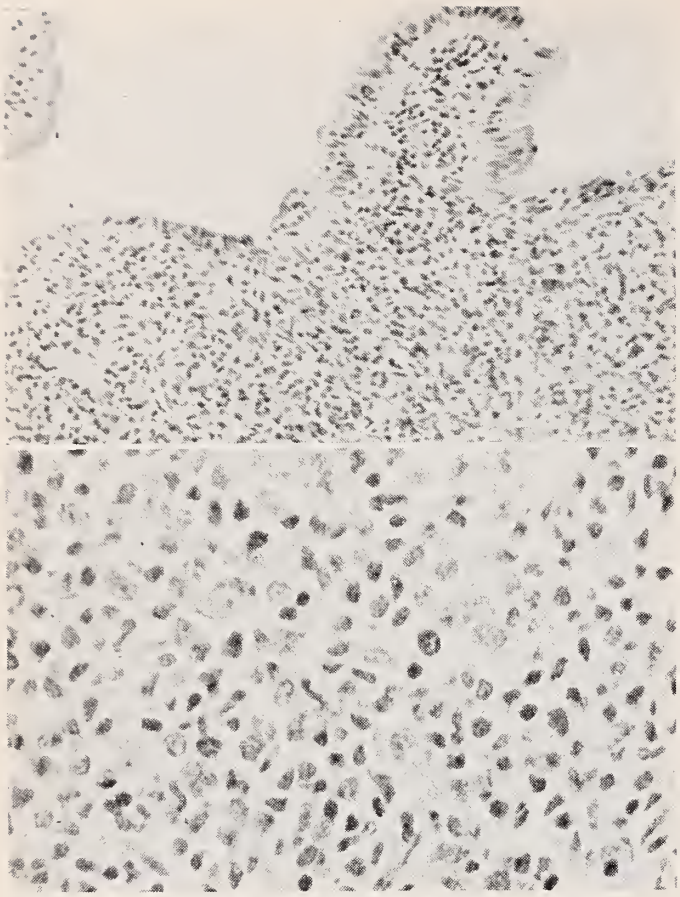

Figure 3. a. Low power and b. higher magnification of the mucosa of the jejunum. The normal mucosal pattern is obliterated and the stroma contains proliferating round cells, mostly large lymphocytes and reticulum cells.

per cent, white blood count 7,800. Absorptive studies revealed deterioration of function (Table III). Marrow aspiration revealed a slightly hypocellular marrow which was considered nondiagnostic. Repeat jejunal biopsy revealed no change from the previous one, but was thought to be diagnostic of malignant lymphoma. Small bowel X-rays revealed marked abnormality of the "deficiency pattern" type. Exploratory laparotomy was then performed to determine the extent of the lymphoma.

Histological examination of mesenteric and preaortic nodes and jejunum (full thickness) revealed malignant lymphoma (Figure 3); subsequent punch biopsy of rectal mucosa revealed none.

The patient received radiation therapy to the abdomen. Initially there occurred some nausea and vomiting when whole abdominal radiation was employed, but when changed to the "strip" technique it was tolerated well. A total abdominal midline dose of 3,500 r was given.

Steroids were continued on a diminishing dosage program and when the patient was seen in March, 1964, she had only mild abdominal symptoms which did not incapacitate her. There had been progressive weight gain. Recent laboratory studies revealed a serum albumin of 4.2 Gm per cent, serum globulin 2.5 Gm per cent, serum carotene 115 gamma per cent, and serum calcium 9.3 mg per cent.

Peroral biopsies were successful in establishing the etiology of two unusual cases of intestinal malabsorption; in both instances the disease was confined to the intestine and in addition, in the second case, to the lymph nodes in the peritoneal cavity. Definite diagnoses were established by means of the peroral small intestine biopsy. The patient with sarcoidosis was spared an exploratory laporatomy which would otherwise have been necessary; the second patient was explored subsequent to two peroral biopsies and the diagnosis of malignant lymphoma was confirmed; full thickness surgical biopsy of the jejunum demonstrated that the biopsy capsule recovered representative material.

The use of the technique permits one to diagnose a number of diseases which heretofore required exploratory laporatory with direct biopsy and enables one to institute the most appropriate therapy. Serial examinations with this technique also permit the study of the course of disease processes.

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SUMMARY OF LABORATORY VALUES Pt. B. S.

NORMALS		Sept. '61 1st Hosp.	Oct. '61 Gluten restr.	Jan. '62 after steroids	Apr. '62 steroids con't.	Feb. '62 re-adm. steroids con't.	Nov. '63 out patient
50 - 200 γ %	Serum carotene	30	75	--	--	25	115
9 - 11 mg%	Serum calcium	8.1	7.8	8.2	9.4	8.6	9.3
3.2 - 4.1 Gm%	Serum albumin	2.4	2.8	3.2 —	4.3	2.8	4.2
2.8 - 3.7 Gm%	Serum globulin	1.4	1.8	--	2.4	2.1	2.5
>5 Gm	d - xylose	3.3	--	--	--	1.58	--

Table III

RADIOLOGIC DEMONSTRATION OF MEDIASTINAL EMPHYSEMA COMPLICATING ASTHMA

Brit B. Gay, Jr., M.D., *Atlanta*

■ ***Lateral soft tissue radiographs of the neck are very helpful in the diagnosis of this condition.***

MEDIASTINAL and subcutaneous emphysema is an uncommon complication of acute bronchial asthma. Three such cases have been seen at The Henrietta Egleston Hospital for Children since 1960; in the same period, there were 245 patients treated in the hospital for bronchial asthma. It is the purpose of this communication to report briefly these cases and to review the recent literature on mediastinal emphysema as a complication of acute bronchial asthma.

Case One

WP, a 15-year-old male, had had bronchial asthma since seven or eight years of age. The asthmatic attacks had been rather mild and infrequent during the last two years. Three days before admission he had a recurrence of bronchial asthma requiring the attention of his physician at midnight. Following medication given by his physician, the respiratory distress became less but did not completely disappear. He was seen again on the day of admission in his physician's office. His respiratory distress had cleared completely but he continued to have expiratory wheezes heard on auscultation of the chest. On palpation of the neck, subcutaneous crepitus could be felt. He was referred as an out-patient to the Department of Radiology of The Henrietta Egleston Hospital for Children where radiographs of the chest were requested.

Radiographic examination of the chest (Figures 1A, 1B, 1C) revealed several prominent radiolucent streaks in the mediastinum. These air collections extended from the superior mediastinum into the supraclavicular area and in the left chest wall laterally. In the lateral radiograph (Figure 1B) linear streaks of air could be seen anterior to the ascending aorta and also along the posterior cardiac margins to the diaphragm. No pneumothorax or intraperitoneal air could be seen. A lateral soft tissue radiograph of the neck (Figure 1C) was obtained which demonstrated extensive retropharyngeal air collections up to the skull base. The pharyngeal mucosal surface was displaced one cm. from the anterior vertebral margin by the air collection in the retropharyngeal space.

The patient was admitted for further observation for a four-day period. He complained of some pain on swallowing and the swelling in the neck became more prominent during the day following discussion, but afterwards began to subside. Radiographs on the day of dismissal showed a decrease in the extent of the mediastinal emphysema.

Case Two

OAC, a 15-year-old boy, was admitted to the Henrietta Egleston Hospital for Children for treatment of an attack of severe bronchial asthma. The patient had been an asthmatic since seven years of age. During the six months prior to admission, his asthmatic attacks had been controlled by inhalation of Isuprel nebulizer. Three days before admission, an attack of bronchial asthma could not be controlled by the usual medication and respiratory distress became severe. Six hours before admission, he complained of chest pain which radiated into the neck, severe choking spells, and increasing difficulty with swallowing.

Physical examination revealed a patient in acute distress. Pulse 120, respirations 60, and blood pressure 102/92. Crackling subcutaneous emphysema could be felt over the right stenomastoid muscle. Rhonchi were heard throughout both lungs. The heart sounds were not audible. The pulse was weak and rapid.

Portable radiographic examination of the chest revealed marked over-inflation of the lungs, a narrow heart shadow, and a wide anterior-posterior diameter of the chest. Extensive mediastinal and cervical emphysema was evident. Linear radiolucencies were seen behind the heart in the posterior medias-

From Department of Radiology, Emory University School of Medicine and The Henrietta Egleston Hospital for Children, Augusta.

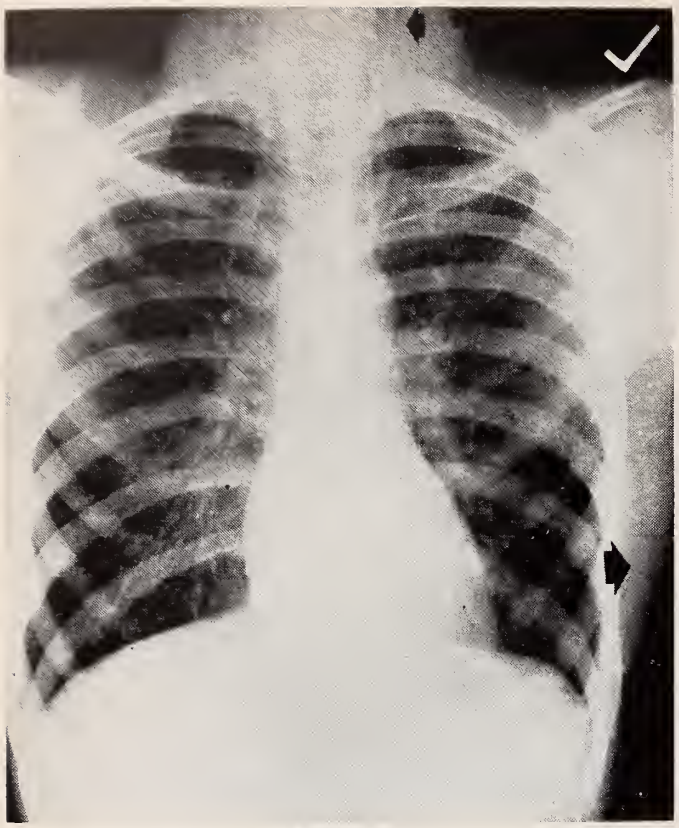

Figure 1A
Case I. Frontal radiograph of chest. Note radiolucent streaks in superior mediastinum and supraclavicular soft tissues (arrow) representing mediastinal emphysema. Subcutaneous air is present in left thoracic wall (arrow).

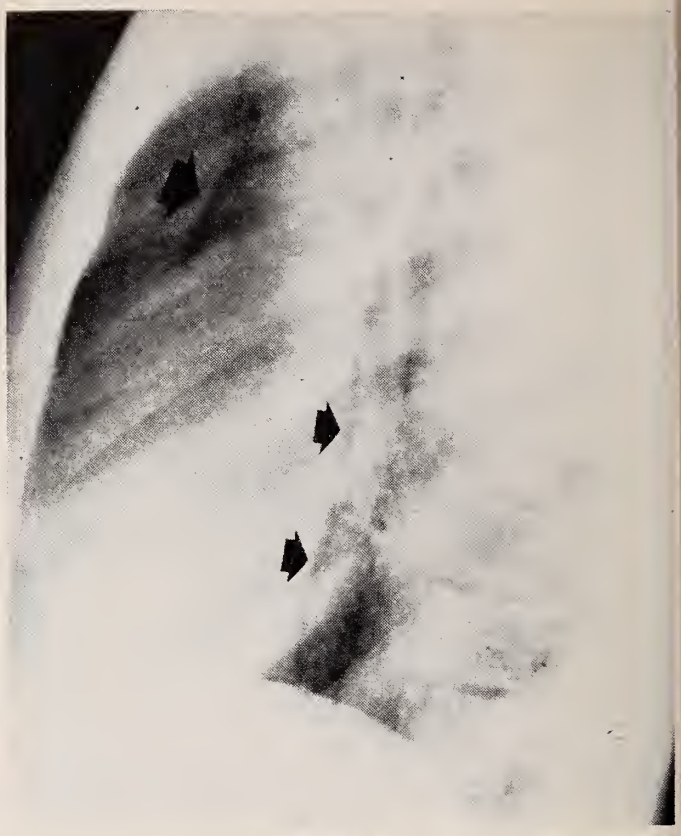

Figure 1B
Case I. Lateral radiograph of the chest. Note Mediastinal air anterior to ascending aorta (large arrow) and along the posterior cardiac shadow (small arrows).

tinum superiorly. No pneumothorax was present. Eight hours later repeat radiographs of the chest (Figures 2A & B) showed the same findings as on admission. A lateral soft tissue radiograph of the neck (Figure 2C) was obtained which revealed considerable retropharyngeal and subcutaneous air in the neck. Repeat radiographic studies about 36 hours later revealed a decrease in the extent of the mediastinal emphysema. Radiographs six days later revealed complete absorption of the mediastinal and cervical emphysema.

Figure 1C
Case I. Lateral soft tissue radiograph at the neck demonstrating extensive soft tissue and prevertebral emphysema.

Response to treatment was rather slow. Adrenalin had no effect. On admission, the patient had some evidence of air block with a rapid, weak pulse and a narrow pulse pressure. Treatment with steroids and benadryl produced gradual improvement over a four day period.

Case Three

ABG, a six-year-old boy, had been troubled with bronchial asthma for three years. Since onset he had had many attacks, some of the more severe ones requiring cortisone. One day before admission, the patient began wheezing and developed dyspnea and paroxysmal coughing episodes. He was given cortisone orally with some relief of respiratory distress, but his mother subsequently noted swelling of the neck late in the day before admission. At this time, the child complained of a sore throat.

Physical examination on admission to the Henrietta Egleston Hospital for Children revealed a temperature of 99.2 degrees, a pulse of 120, and respiratory rate of 30. The patient was in moderate respiratory distress. Subcutaneous emphysema was noted in the neck on both sides. The anterior-posterior diam-

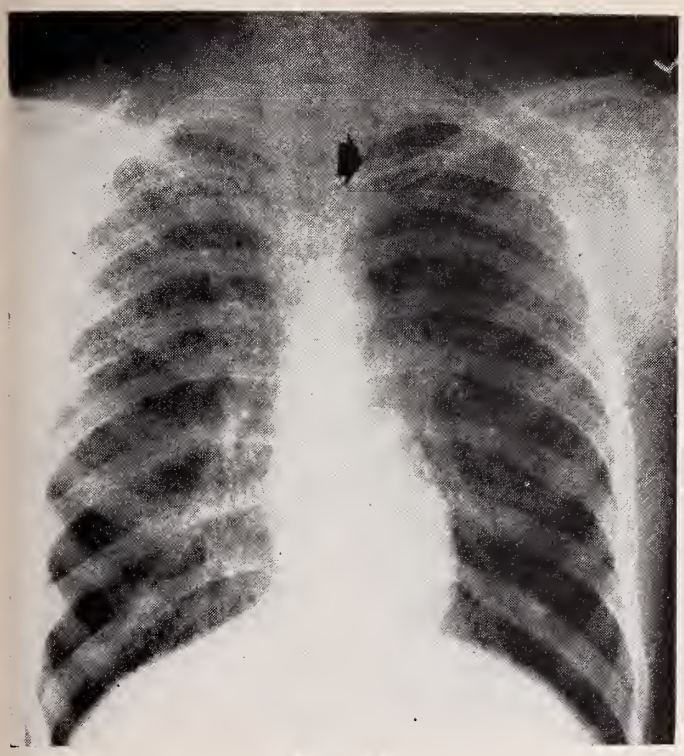

Figure 2A
Case II. Frontal radiograph of the chest. Faint radiolucent streaks are present in the superior mediastinum (arrow) and supraclavicular areas and in left thoracic wall.

eter of the thorax was increased. Occasional rhonchi were heard over the lungs on auscultation. Crepitant rales were present posteriorly at the left lung base with diminished breath sounds in this area. Subcutaneous emphysema could be palpated over the right thoracic wall.

Radiographic examination of the chest revealed a large amount of air in the mediastinum with dissection of the air into the neck and chest wall. No pneumothorax was present.

The patient's course following admission was that of gradual improvement over a week's period with no further complications.

Discussion

Bronchial asthma is not a common cause of mediastinal emphysema. Evans and Smalldon[1] collected 50 cases of mediastinal emphysema from the New York Hospital. Only four of these patients, who were between three and eight years of age, had bronchial asthma as the cause of the mediastinal emphysema. Norman[8] in 1957 collected thirty cases of mediastinal emphysema complicating asthma from the literature, two being fatal. McNicholl[7] in 1960 reported the case af an eight-year-old asthmatic boy who developed mediastinal emphysema which required surgical incision in the neck to relieve the tension pneumomediastinum.

Jorgensen, et al, reported personal experience with eight cases of complicated asthma in childhood, four patients having mediastinal and/or subcutaneous emphysema, three having pneumothorax only,

Figure 2B
Case II. Lateral radiograph of the chest. Note mediastinal emphysema anterior to ascending aorta and in anterior superior mediastinum (arrow) as well as posterior to the heart and great vessels (arrows). In this case the lateral chest radiograph demonstrates the mediastinal emphysema more adequately than does the frontal view.

and one having pneumothorax with mediastinal emphysema. From the literature these authors collected,

Figure 2C
Case II. Lateral soft tissue radiograph of the neck. Note streaks of air in the retropharyngeal soft tissues.

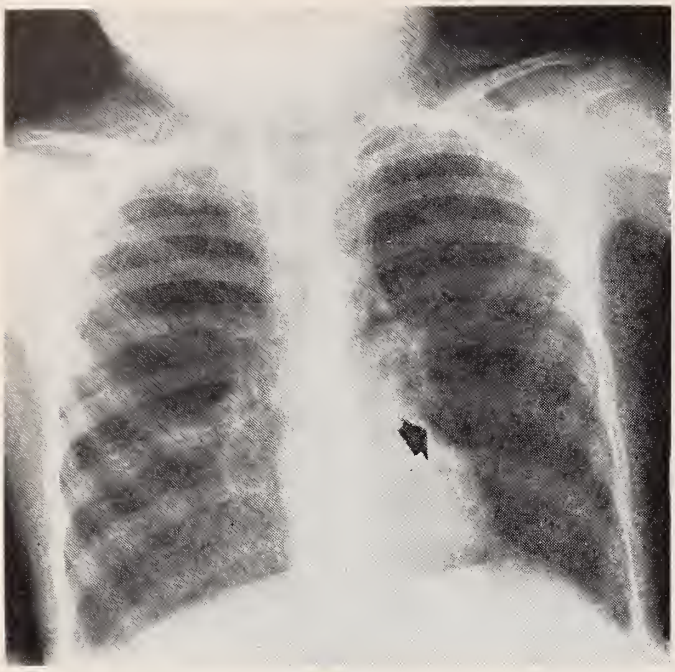

Figure 2A
Case III. Frontal radiograph of the chest. Mediastinal emphysema separates the mediastinal pleura away from the left heart border (arrow). Note the superior mediastinal and supraclavicular air collections.

eight other reported cases of mediastinal emphysema and three cases of pneumothorax since 1950 associated with asthmatic episodes. Turiaf, et al,[9] in 1200 asthmatic patients found 13 who developed pneumothorax and three who developed mediastinal emphysema as a complication of asthma.

Mediastinal emphysema has many causes[5] including rupture of larynx, trachea or esophagus; surgery of thorax or abdomen; tracheotomy and neck dissection; endotracheal anesthesia; laryngeal, tracheal or bronchial obstructions (as with foreign bodies, asthma, tumors, and infections); resuscitation methods; glass blowing and playing wind instrument; pneumothorax and pneumoperitoneum; caisson disease; pulmonary infarction and atelectasis; bronchopneumonia complicating contagious diseases of childhood; blast injury and other thoracic or cervical trauma; and various acute respiratory distress syndromes of the newborn period.

The Pathogenesis

In asthmatic patients, the pathogenesis of mediastinal emphysema appears to be secondary to increased intra-alveolar pressure with resulting rupture of the alveolus which allows air to dissert into the interstitial septal planes of the lung back toward the hilum into the mediastinum.[5,6] Here the air may pass upward into the supraclavicular soft tissues or subcutaneous tissue, or may dissect inferiorly to become retroperitoneal or intraperitoneal. It is common also for the air to rupture at the hilum of the lung into the pleural space, most often the left. If the air becomes trapped in the mediastinum under high pressure, there is interference with venous return to the right and left atria since the vena cavae and pulmonary veins are thin-walled and have low pressures. This results in low cardiac output, a falling systolic blood pressure, distention of the neck veins, and rising diastolic blood pressure. If this state is not quickly relieved, vascular collapse rapidly ensues. This danger is apparently much greater the younger the child and is particularly dangerous in the newborn period.[4]

In the severe asthmatic patient the presence of increasing substernal or deep chest pain, difficulty in swallowing, pain on swallowing, and swelling of the neck should alert the physician to the possibility of complicating mediastinal emphysema. A severe coughing paroxysm may precede development of mediastinal emphysema.[3]

Physical Signs

Physical examination will usually reveal subcutaneous cervical crepitus due to dissection of air into the soft tissues of the neck. Cardiac dullness may be obliterated by anterior mediastinal air. Auscultation may reveal a crunching sound synchromous with systole (Hammon's sign), and there may be hyperresonance and decreased breath sounds over the left thorax due to associated pneumothorax.[3] Particularly ominous signs are distention of the neck veins, paradoxical pulse with falling systolic and rising diastolic blood pressure, increasing cyanosis and shock, all being indicative of severe tension pneumomediastinum with impending vascular collapse.

Easily Recognized

Radiographically, the presence of mediastinal emphysema is usually easily recognized.[1] In the frontal radiograph, radiolucencies in the superior mediastinum may be present. Air may be identified along the margins of the heart silhouette or aortic arch and the thin, pencil-lined density of the mediastinal pleura may be seen a few millimeters lateral to the cardiovascular shadows. The lateral chest radiograph is perhaps more diagnostic than the frontal view and should always be obtained. Air can be seen most commonly along the posterior cardiac contour or substernally in front of the ascending aorta. A lateral soft tissue radiograph of the neck is very helpful in identifying minimal collections of air which have dissected upward into the neck along the prevertebral soft tissue. This view should be requested for all patients when there is a question of mediastinal emphysema from any cause. In patients with esophageal rupture, the mediastinal air is frequently not seen on the chest radiograph but can be identified by the lateral radiograph of the neck.[2]

Fortunately, the course of mediastinal emphysema complicating acute bronchial asthma is usually benign though two of 30 cases collected by Norman in

1957[8] were fatal. In most cases the mediastinal pressure is spontaneously relieved by dissection of the air into the neck or pleural spaces. Bilateral pneumothorax can be another serious sequel to mediastinal emphysema. Surgical incision into the suprasternal area has been necessary as a lift-saving procedure to give egress to the trapped mediastinal air.[7] The soft tissue emphysema is usually absorbed in two to 14 days.

Mediastinal emphysema complicating asthma is probably much more common than reported in the literature and could be diagnosed by the radiologist more often, if he would keep this possible complication in mind any time he is called upon to interpret the radiographs of an asthmatic patient. Minimal mediastinal emphysema will probably be more frequently diagnosed if lateral soft tissue radiographs of the neck are requested in those patients where this is a clinical possibility.

Summary

Three cases of mediastinal emphysema complicating asthma are presented with a brief consideration of the pathogenesis, clinical features, radiographic signs and prognosis of this condition. The value of the lateral radiograph of the neck to demonstrate minimal mediastinal emphysema is stressed.

Addendum:

Since completion of the above manuscript, one additional patient has been seen with mediastinal and subcutaneous emphysema complicating asthma.

Case Four

JDB, a four-year-old male, had had asthmatic attacks recurrent since early infancy. Nine days prior to admission to Henrietta Egleston Hospital for Children, a severe asthmatic attack developed which was not responsive to the usual medication. This attack was associated with an upper respiratory infection. Because of increasing respiratory distress, the patient was eventually admitted to the hospital on January 30, 1964.

Physical examination revealed a temperature of 102 degrees with acute respiratory distress and slight cyanosis. The pharynx showed some erythema. The chest showed marked retraction. There was increased resonance. Expiration was prolonged. Diffuse wheezes were heard throughout the thorax. The heart rate was 128 and the sounds were distant. The blood pressure was normal. No palpable subcutaneous emphysema could be noted. The patient was begun on steroids and antibiotics and placed in a croupette.

On examination early the morning after admission, it was noted that subcutaneous crepitus had developed in the region of the neck and lateral chest wall on both sides. A radiograph of the chest at this time demonstrated rather extensive mediastinal emphysema all the way from the diaphragm to the thoracic outlet. There was a marked supraclavicular emphysema between the muscle planes; and also, on the lateral view of the neck, extensive retropharyngeal emphysema was noted. No pneumothorax was present.

The patient's condition improved gradually, and he was discharged from the hospital about one week after admission with resorption of the greater portion of the subcutaneous air. Repeat chest radiographs on the day of discharge showed only a faint residual mediastinal emphysema present.

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PHYSICIANS WITH CHILDREN TO BE ACCEPTED BY PEACE CORPS

A new Peace Corps policy concerning married doctors who wish to volunteer for overseas assignments has been announced by Director Sargent Shriver.

Peace Corps Volunteer physicians will be allowed to take their families with them to overseas posts, Shriver said.

In the past, Volunteer physicians have been subject to the same rules governing all other Peace Corps Volunteers: No children allowed, and wives accepted only if they are qualified and willing to serve in the same project.

Under the new policy, wives of physicians will not be required to serve as Volunteers although they must complete a Peace Corps application for information purposes. Doctors with children can be accepted and adequate family living allowances will be provided.

The new policy was adopted as requests for doctors continued to pour in from Peace Corps host countries in Africa, Asia and Latin America. All types of specialists are needed.

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James N. Brawner, Atlanta (1966)
Thomas L. Ross, Macon (1965)
R. C. Pendergrass, Americus (1967)
Donald R. Rooney, Marietta (1965)
W. D. Stribling, Gainesville (1967)

Subcommittee on Cancer
R. C. Pendergrass, Americus, *Chairman*
Ralph J. Davis, Rome
John T. Mauldin, Atlanta
Grady N. Coker, Canton
Thomas Harrold, Macon
Hoke Wammock, LaGrange
Robert L. Brown, Atlanta
John T. Godwin, Atlanta
H. H. McGee, Jr., Savannah
Menard Ihnen, Augusta

Subcommittee on Mental Health
1st District—Abraham Center, Savannah
2nd District—E. E. Davis, Thomasville
3rd District—Frank A. Wilson, Decatur
4th District—L. C. Buchanan, Decatur
5th District—James N. Brawner, Atlanta
6th District—Z. S. Sikes, Macon
7th District—M. B. V. Teem, Marietta
8th District—Leo Smith, Waycross
9th District—W. D. Stribling, Gainesville, *Chairman*
10th District—J. Kenneth McDonald, Augusta
Addison M. Duval, Atlanta, *Ex-officio*

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA

Name	*Address*	*Classification*	*County Society*
Anderson, Mary M.	2931 North Druid Hills Road, N.E. Atlanta, Georgia 30329	Active	DeKalb
Avret, Edwin T.	3290 Memorial Drive Decatur, Georgia	Active	DeKalb
Ermutlu, Ilhan M.	47 Trinity Avenue, S.W. Atlanta, Georgia 30303	Active	Fulton
Funderburg, Frederick D.	13 Forsyth Street Monticello, Georgia	Active	Jasper
Headley, William M.	Milledgeville State Hospital Milledgeville, Georgia	Active	Baldwin
Kuglar, Everett C.	Milledgeville State Hospital Milledgeville, Georgia	Active	Baldwin
Sawyer, Horace K., Jr.	300 Boulevard, N.E. Atlanta, Georgia 30312	DE2	DeKalb
Stewart, Charles R.	1444 Fourth Avenue Columbus, Georgia	Active	Muscogee
Vohman, Mann D.	1968 Peachtree Road, N.W. Atlanta, Georgia 30309	Active	Fulton

1964 CALENDAR OF MEETINGS

State

September 20-21—Scientific Sessions of the Georgia Heart Association, Augusta Town House, Augusta.

October 8-9—Sixteenth Annual Session, Georgia Academy of General Practice, Augusta Town House Motor Inn, Augusta.

May 2-5, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

August 24-27—Fourth Inter-American Conference on Toxicology and Occupational Medicine, sponsored by the University of Miami School of Medicine with the cooperation of the University of Puerto Rico School of Medicine, Fountainebleau Hotel, Miami Beach, Fla.

August 25-28—American Association of Blood Banks, Shoreham Hotel, Washington, D.C.

September 10-12—American Association of Obstetricians and Gynecologists (members and invited guests), The Homestead, Hot Springs, Va.

September 13-15—Medical Progress Assembly, Parliament House, Birmingham, Ala.

September 13-15—Fall Meeting, Tennessee Pediatric Society, Lake Short Lodge, Chattanooga, Tenn.

September 16-18—American Association of Medical Clinics, Americana Hotel, Bal Harbour, Fla.

September 24-26—Dixie Postgraduate Assembly, Dauphin Island (Mobile) Ala.

September 25-26—American College of Obstetricians and Gynecologists, (District 7), Dinkler-Tutwiler Hotel, Birmingham, Ala.

September 26-27—Congress on Occupational Health, Rice Hotel, Houston, Tex.

September 28-29—Tennessee Valley Medical Assembly, Tivoli Theatre, Chattanooga, Tenn.

October 2-4—American College of Obstetricians and Gynecologists, (District 4), Robert Meyer Hotel, Jacksonville, Fla.

October 8-10—Association of American Physicians and Surgeons, New Orleans, La.

October 10-14—American Society of Anesthesiologists, Americana Hotel, Bal Harbour, Fla.

October 11-14—Medical Society of Virginia, Golden Triangle Hotel, Norfolk, Va.

October 16-24—American Society of Clinical Pathologists, Americana Hotel, Bal Harbour, Fla.

October 17-20—College of American Pathologists, Americana Hotel, Bal Harbour, Fla.

October 20-22—Association of Military Surgeons of the United States, Sheraton-Park Hotel, Washington, D. C.

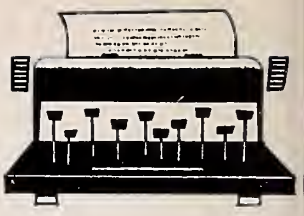
National

October 21-22—American Heart Association Council on Arteriosclerosis, Hotel Shelburne, Atlantic City, N. J.

October 23-25—American Heart Association Scientific Sessions, Convention Hall, Atlantic City, N. J.

November 29-December 2—American Medical Association Clinical Meeting, Auditorium and Exposition Hall, Miami Beach, Fla., and the Americana Hotel, Bal Harbour, Fla.

EDITORIALS



Cardiac Arrhythmias

One-half century has elapsed since the discovery of the cardiac electrical system. The electrocardiogram has enabled us to record and quantitate these forces and to correlate them with different conditions of the heart. Devices have now been made available which are capable of producing controlled electrical energy for use in the management of many cardiac arrhythmias.

Self-Perpetuating

Frequently cardiac arrhythmias are self-perpetuating, that is, atrial fibrillation, ventricular fibrillation, ventricular tachycardia and probably certain atrial tachycardias. Instantaneous deplorization of the cardiac electrical system will usually allow the normal pacemaker to again manifest itself. High energy direct current has proven quite adequate for this purpose since the duration is short (generally .0025 second) and it can be synchronized with the existing cardiac rhythm when desired. The latter feature reduces the possibility of discharging through the vulnerable period of ventricular repolarization.

The value of defibrillation for the management of ventricular fibrillation is unquestioned, but at present there is some hesitancy among physicians to turn to the electrical units initially in other emergency situations, such as ventricular tachycardia and uncontrolled atrial flutter. These arrhythmias usually respond readily to capacitor discharge countershock. In most situations momentary cessation of the arrhythmia is adequate to restore normal rhythm; if the provocative source is still present, smaller amounts of quinidine or procainamide are necessary to prevent recurrence of arrhythmia.

The Depressants

The common anti-arrhythmic medications such as quinidine, procainamide and lidocaine are potent depressants of the myocardium. The amount necessary to control arrhythmias in an already poorly functioning myocardium may compromise cardiac output to such an extent that failure may supervene. Quinidine has effect on parasympathetic stimulation, the conduction system itself — and as Dr. Thomas N. James[1] has recently shown, on the functional capacity of the sinus node itself. Individuals vary greatly in their response to these drugs and in some, even small doses can rapidly produce toxic effects and even death. These unpredictable actions are rarely of major concern with electrical countershock. The considerable clinical experience gained thus far with capacitor discharge units has failed to show evidence of significant myocardial damage secondary to the shock, and surprisingly few refractory cases have been encountered.

The use of synchronized direct current countershock for atrial fibrillation has been particularly useful, and studies are currently underway to determine the indications for reversion of this condition.[2] In many cases the resultant increase in myocardial efficiency is gratifying, and in some patients, may even eliminate congestive heart failure or angina. Another significant observation has been that even short periods of sinus rhythm (two or three weeks) may restore the degree of compensation and increase cardiac reserve so that symptoms of failure do not recur even if atrial fibrillation returns.

No Improvement Shown

A few patients show no improvement following electrical reversion; in many of these fluoroscopy indicates that effective mechanical atrial systole does not follow electrical systole. The probability of this outcome cannot yet be predicted but the patient is no worse because of the procedure.

Short-term cardiac pacing has been a problem for several years. External pacemaker electrodes are only occasionally successful in maintaining satisfactory rhythm, and even then it is commonly a painful experience for the patient. The development of a suitable, small, flexible bipolar intracardiac pacemaker electrode catheter has been very welcome.

Complete heart block occurs in a significant percentage of acute myocardial infarctions, especially in those from occlusion of the right coronary artery. Fortunately, this condition is only rarely permanent, and if adequate stimulation can be supplied during the critical period of the first week or so, then normal rhythm is usually restored.

Using flouroscopy, a bipolar pacemaker electrode can be inserted with relative ease through an external

juglar vein and into the outflow tract of the right ventricle. Once the electrode is in place, pacing can be accomplished without the patient's knowledge and the critical period passed with the assurance of constant control of electrical activity. If necessary, pacing can be maintained for more than a month from this site without any appreciable increase in risk.

At present, floating electrodes are being developed which will be able to be carried by the venous circulation to the desired location for pacing. This will obviate the need for moving the patient to X-ray for visualization of the catheter tip since the location of these new catheters can be readily ascertained by intracardiac electrocardiography using the catheter tip as an exploring electrode.

Temporary intracardiac pacemakers are also useful as a precautionary measure for patients with complete heart block who undergo any surgical procedure under general anesthesia.

Presently electrical stimulation offers a highly effective, safe method of management of cardiac arrhythmias, especially in the compromised myocardium where the use of drugs may be hazardous.

E. Alan Paulk, Jr., M.D.

REFERENCES

1. James, T. N. and Nadeau, R. A.: The Mechanism of Action of Quinidine on the Sinus Node Studied by Direct Perfusion through its Artery, *Amer. Heart J.* 67:804-812, 1964.

2. Paulk, E. A.; Hurst, J. W., and Proctor, H. D.: A Study of Atrial Fibrillation, submitted for publication.

The Paradox of Pharmaceutical Advertising

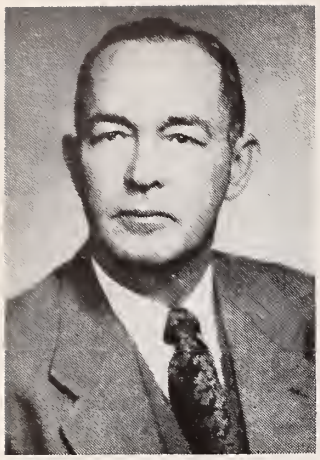
It must be obvious to most of our readers that the content of the *Journal* has been reduced considerably in the past few months. This cutback in the size of our publication has not been dictated by a lack of available desirable material for publication, but by a marked reduction in our volume of advertising from the ethical pharmaceutical manufacturers. All state medical journals and many other scientific publications have suffered this cutback and have had to reduce their size accordingly. Yet we have noted an almost explosive growth of mass circulation, abstract types of publication. One look at these publications will confirm the fact that their growth is solidly underwritten by ethical drug advertising. It is ironic that the sources of much of the material published by these profit-inspired publications are being endangered by these reductions in advertising volume in the scientific journals.

Statistics may prove that because of the mass unpaid circulation of these abstract type publications, the advertising dollar of the manufacturer goes farther than in the scientific journals which provide the original material. From a physician's point of view this concept of the parasite ultimately consuming its host because of a "convincing advertising salesman's pitch" is basically unsound. Nevertheless, this paradox seems to make sense to the advertising executives who make these decisions.

We are all aware that the great majority of our scientific publications were begun and are maintained as the official organ of organizations of physicians. These journals are oriented toward basic scientific investigation or toward the clinical practice of medicine. The long time survival and growth of these publications provide eloquent evidence of their readership and influence with their readers. The fact that physicians pay money year after year for the privilege of receiving these journals suggests good evidence of their acceptance and readership. Such journals have an editorial policy which reflects the basic interests and standards of their sponsoring organizations. Because of this, these publications command the respect and interest of the physician who ultimately prescribes the products promoted by the ethical pharmaceutical manufacturers.

With such a set of circumstances as outlined above, it becomes our obligation as physicians to be more aware of the role that has been so actively taken by the ethical drug firms in the support of our publication. If these firms are continuing to favor our journal with their advertising message, their representatives who call upon us in our offices should be made aware of our appreciation. If a detail man's firm is not advertising in our *Journal,* a few gentle reminders to him will ultimately be transmitted to his company officials. Our visits to exhibit booths sponsored by pharmaceutical manufacturers at our scientific meetings will go far toward making these companies know of our interest and continuing support of their ethical products.

The House of Delegates of the Medical Association of Georgia at our recent Annual Meeting in Macon made official note of the importance of this relationship and specifically urged physicians to be more active in support of our advertisers. Let's all get their message and take appropriate action.



PRESIDENT'S LETTER

THE AMA ANNUAL MEETING — 1964

THE MEETING in San Francisco this year was eminently successful. The weather man looked with favor on us throughout the meeting. Those wives packing extra suit cases with cold weather gear hauled it back unworn. Naturally they were disappointed, because there's nothing more frustrating to a good lady than to plan to wear a certain dress on the proper occasion, and the occasion never arises. The extra bags annoyed the husbands too.

On Sunday prior to the official opening of the House of Delegates, the President of each state association was introduced and sat on the stage behind the Speaker—this was an impressive sight. More impressive was the fact that every state president was in attendance.

MAG Breakfast Meeting

We had our usual 7:00 A.M. MAG breakfast prior to the meeting of the House of Delegates on Monday. At this gathering all the resolutions and reports were gone over carefully, and a decision was made as to whether we should support, oppose, or express no position. Many of the resolutions are of little or no interest to Georgia. An instructed representative from Georgia was then sent to each reference committee to make known our stand, and also to gather any additional information that might be brought out during the discussion in the various reference committees.

On Tuesday morning at the MAG breakfast meeting, reports were made and from this information we gathered that probably our position was the same as that of the vast majority, save on one issue. This particular report pertained to raising AMA dues some $15-$20 per year for the next three years. Our representative was the only one who spoke against this at the committee meeting. Everyone else spoke for it. We felt sure, therefore, that the committee would bring out a favorable report. If they did, we decided to fight it on the floor, because we felt that sufficient information had not been given at this time to justify a raise in dues.

On the floor of the House of Delegates, our prediction proved correct. The committee brought out a favorable report and moved for its adoption. One of our delegates immediately moved that it not be adopted and that the Board of Trustees be instructed to study the reasons why such increases were needed and to give a full report on this at the next House of Delegates meeting. Much to our surprise, while we had no support at the reference committee, a sizeable majority supported us on the floor of the House, and the motion for its adoption was defeated. I bring all this out to indicate to members of MAG that the House of Delegates of the AMA is a truly democratic organization. It does not make any difference how small or how big a state may be. If they are sincere and informed about what they are saying, other delegates will listen.

It was my pleasure to be assigned to the reference committee on medical education. It impressed me to know that there were 30 deans of medical schools in the audience before this committee. Many resolutions were brought in concerning the public's request that more general practitioners be trained. A recent poll by the Opinion Research Corporation of Princeton, New Jersey, revealed that 74 per cent of the sick people were first seen by a G P, and that 84 per cent of those polled wanted a G P as their family physician. There was considerable discussion on this—the committee voted favorably on all these resolutions, and they were approved unanimously by the House of Delegates.

No King-Anderson

During the second session of the House of Delegates, the Speaker read a telegram from Washington, D. C. This was to the effect that the House Ways and Means Committee in the Congress had voted *not* to bring out the King-Anderson bill at this time. This message brought the assembly to its feet with vigorous applause. One of the delegates, however, sobered us all a little by reminding us that they could always try to tack it on to a Senate bill as they did in 1962. If you remember, the Senate defeated it by only four votes. I think that it's well to remember the admonition that someone gave not too long ago

and that was, "when the proponents think they have the votes to pass King-Anderson, they will work out some way to vote on it."

Dr. Annis was his usual charming self. He can speak like "a dog trotting down a path; he looks straight ahead and then from side to side, scenting out his audience and never missing a step. If he discovers something that the audience especially likes he can really take off in full cry." He has done and will continue to do a great deal for American medicine. We owe him an eternal debt of gratitude.

Dr. Norman Welsh, our present President of AMA, gave a brilliant and scholarly address. He delivered it exceptionally well, and when one calmly reads it in its entirety, it is even more impressive.

I came away from the meeting feeling that the AMA was in good hands, from its President through the Board of Trustees and the House of Delegates, and I can assure you that Georgia is well represented with its delegates and alternate delegates plus some of our other members on various AMA committees. I can also assure the Section of Internal Medicine that they are adequately represented with a sincere hard-working delegate by the name of Dr. Carter Smith from Atlanta.

J. G. McDaniel, M.D.
President, Medical Association of Georgia

MEDICAL COLLEGE ANNOUNCES FACULTY PROMOTIONS, APPOINTMENTS

The Medical College of Georgia has revealed a group of faculty promotions and appointments effective July 1, 1964. They were announced by Dr. Walter G. Rice, Dean of the School of Medicine, following approval by the University System Board of Regents.

Appointed Regents' Professor of Biochemistry is Dr. Titus H. J. Husiman. The first such appointment in the history of the Medical school, the promotion is acknowledgement of Dr. Husiman's contributions to the teaching and research programs of the college.

Promoted to the rank of Professor are Drs. Edwin L. Brackney, Rufus F. Payne and A. Calhoun Witham. Dr. Brackney is a member of the faculty in the Department of Surgery. Dr. Payne, who also is superintendent of the Medical College's teaching hospital (Eugene Talmadge Memorial Hospital), teaches in the Department of Medicine. Dr. Witham, also in the Department of Medicine, is chief of the college's Cardiology Division.

Given the rank of Associate Professor are Dr. Francis J. Behal, Biochemistry; Dr. Darrell L. Davis, Physiology; and Dr. Z. W. Gramling, Anesthesiology. In the Department of Medicine: Drs. Wayne V. Greenberg, James T. Hamlin, III, James B. Hudson, and Bill M. Domm.

Dr. Martha S. McCranie was given an appointment as Associate Clinical Professor of Psychiatry.

The following promotions to the rank of Assistant Professor were announced by Dr. Rice: In Psychiatry, Drs. Gerald W. Burroughs, Mercer B. Sell, Kenneth D. Stewart (clinical psychology); Cassius M. Clay, Radiology (radiological physics); Dr. Joseph G. Hollowell, Pediatrics; Dr. George H. Nelson, Obstetrics and Gynecology; Dr. Robert A. Parrish, Surgery; Dr. Lowry L. Sheely, Anesthesiology; Dr. Nancy Thornton, Pediatrics and Pathology.

Appointment as Assistant Research Professor of Medical Microbiology and Public Health was given to Dr. Mahadeo P. Verma.

The rank of Assistant Clinical Professor was conferred on Dr. Thomas L. Clary, Jr., Medicine; and Dr. James D. Clements, Pediatrics.

Appointed Research Associate in Pathology is Dr. Doris Ruth Nathaniel.

GEORGIA HEART ASSOCIATION TO INVEST $200,000 IN RESEARCH

The Georgia Heart Association will invest $219,419 in heart research during the fiscal year which began July 1, it has been announced by Dr. John L. Elliott of Savannah, President of the association.

Twenty-two grants have been awarded to Georgia institutions in the total amount of $131,020. In addition, the Georgia Heart Association is investing $85,000 in the national research program of the American Heart Association.

The grants include continuing support for the Chairs of Cardiovascular Research and the Established Investigatorships at the Medical College of Georgia and at Emory University. The 18 grants-in-aid include a wide variety of studies on such subjects as circulation of blood in infants; nephritis; nephrosis; in-born heart defects; and high blood pressure.

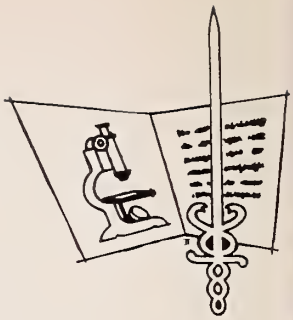
The Chairs of Cardiovascular Research are held by Dr. James B. Hudson at the Medical College of Georgia and Dr. Elbert P. Tuttle at Emory University. Dr. William J. Rawls holds the Established Investigatorship at Emory.

Recipients of grants-in-aid for specific studies include Dr. C. Vernon Sanders at Piedmont Hospital, Atlanta; Drs. Lois T. Ellison, James L. Guest, Jr., David P. Hall, William S. Harms, Lynn L. Ogden, Walter R. Stern, and J. Robert Tcabeaut at the Medical College of Georgia; Drs. Arend Bouhuys, Dorothy E. Bronsfield, Rawser P. Crank, Jr., F. Kathryn Edwards, John T. Galambos, Anthony A. Kattine. E. Alan Paulk, Jr., William J. Rawls, Wade H. Shuford, and Nanette Kass Wenger at Emory University, Atlanta.

The awards announced this week bring to more than $1,600,000.00 the Georgia Heart Association has invested in Research since 1949, according to Dr. Elliott. During this same period, Dr. Elliott noted, the death rate from hypertension among men between the ages of 45-64 has dropped 44 per cent and deaths from strokes in the same age group have been reduced by 22 per cent.

"This is evidence of tangible results that have been brought about through public support of the Heart Fund by the American people," Dr. Elliott said.

CANCER PAGE



CARCINOMA OF THE PROSTATE

Charles Scott, Jr., M.D., *Atlanta*

With the increasing longevity of the male population, adenocarcinoma of the prostate is becoming more than ever a treatable and curable disease and not just a pathologic anatomic diagnosis. The routine autopsy incidence of prostatic cancer is about 15 per cent with the incidence increasing perceptibly with age.

Insidious Onset

The disease is insidious in its onset with usually no subjective findings until advanced stages. Typically the early curable lesion arises as a small hard nodule in the posterior lobe of the prostate and thus is accessible to the examining finger on rectal examination. In the advanced stages the entire gland becomes hard, fixed, and irregular. Bony metastases occur both through the lymphatic and blood stream with bones of the lower spine and pelvis most frequently invaded. Paget's disease may enter into the differential diagnosis. An elevated serum acid phosphatase is usually indicative of spread and is a diagnostic test as well as an aid in the control of the carcinoma by estrogen therapy.

Early diagnosis is paramount if one is to achieve a permanent cure by radical prostatic surgery. The most important diagnostic tool is the physician's index finger and periodic rectal exams. A positive diagnosis is made by the examination of tissue from the suspicious area felt on rectal exam. Biopsy can be done by several routes including perineal transrectal needle biopsy, open perineal biopsy and transurethral biopsy. The treatment depends upon the results of biopsy, the patient's age, general health and life expectancy, the findings on rectal exam, and the presence or absence of metastases. The treatment of choice is radical surgery with removal of the prostate and seminal vesicles. In those patients judged inoperable, the treatment is endocrine therapy with one of the various estrogenic drugs and bilateral orchiectomy. The importance of lifetime continuation of the estrogenic medication cannot be overemphasized to the patient. With extensive pain from metastases, radiation therapy and/or oral cortisone may give some relief.

Dependent Upon Education

In conclusion, the cure of adenocarcinoma of the prostate is dependent upon we as physicians educating the public and our fellow physicians as to the simplicity and importance of regular periodic rectal exams. Without early recognition, the urologist's treatment is practically unchanged since the initial use of estrogens begun in the early 1940's.

340 Boulevard, N.E.

Approved by the Professional Education Committee, Georgia Division ACS.

NARCOTICS COMMISSIONER WARNS AGAINST ILLEGALLY SIGNED FORMS

Examinations of the triplicate copies of official opium order forms reveal that many of these forms are signed by unauthorized persons. Section 151.165 (a) and (b) of Narcotic Regulations No. 5 states, in part, that the official narcotic order forms shall be signed by the purchasing registrant in the same form as on the application for registration (Form No. 678) or may be signed by another person authorized by power of attorney (Form 1315) previously filed with and approved by the District Director of Internal Revenue. Under no circumstances should other persons sign these forms.

We find that most of these violations occur at the retail level. Certainly pharmacists are well aware of the responsibilities associated with the purchasing of narcotic drugs. The order forms are intended solely to cover dispositions of taxable narcotic drugs and preparations to register persons. Part of the system for controlling narcotics is dependent on these order forms. Therefore all registrants are cautioned to avoid violating the regulations by properly executing these official order forms.

George H. Gaffney
Acting Commissioner of Narcotics

THE SELECTION OF CARDIAC PATIENTS FOR SURGERY — II

William D. Logan, Jr., M.D., *Atlanta*

III. Intracardiac Defects

1. *Atrial Septal Defects:*

Four types of atrial septal defects are generally considered in the classification. These are: 1. ostium secundum, 2. ostium primum, 3. foramen ovali, and 4. sinus venosus. When any of these defects is large enough to allow a left to right shunt which causes a pulmonary arterial flow two times that of systemic flow, surgery should be considered. Smaller defects with smaller flows are generally not considered for surgery unless there is evidence of pulmonary hypertension. If pulmonary hypertension is developing, surgery should be done before this reaches a point of causing reversal of the shunt. The exact data regarding pressures and flows is only available with catheter studies.

2. *Ventricular Septal Defects:*

When these defects are isolated, surgery is advised if the shunt through this defect is large enough to cause a 2:1 pulmonary artery-systemic artery flow ratio. Anything less than this indicates a small defect with very little shunt if no pulmonary hypertension is present. The amount of flow, then, is considered one of the prime indications for selection for surgery in ventricular septal defects. The other is that of pulmonary hypertension. There is more potential toward pulmonary hypertension with these defects than with atrial septal defects. Any indication of increasing pulmonary resistance should lead to consideration of surgical repair.

When large ventricular septal defects with large shunts cause congestive heart failure in infants under two years of age, surgical palliation may be done in order to allow the child growth when total correction can be accomplished. The best method is the so-called "banding procedure" where the pulmonary artery is narrowed, causing decrease in pulmonary flow and shunt. This has been very successful.

3. *Atrio-ventricular Canal:*

This congenital defect is a combination of the ventricular and atrial defects involving both the ventricular septum and the atrial septum. The surgical mortality in these patients has been high, primarily because of the incidence of injury to the conductive bundle which lies close to the rim of these defects. However, these children generally do not do well; and if possible, surgery should be considered. The advent and availability of the electrical pacemakers may add an additional stimulus to further surgical efforts on these defects.

4. *Mitral Valve:*

The mitral valve is involved both by congenital abnormality and by acquired deformity developing from rheumatic fever. The congenital mitral defects are rare and must be considered individually as to how much difficulty the child is having. Most of these will need complete valve replacement, and it is more satisfactory if the child can be as old as possible so that a large valve may be inserted. The surgical indications in most patients with acquired mitral valve disease are those set up primarily several years ago in the clinical classification of the American Heart Association. This includes those patients with murmurs of mitral valve disease, but with no significant symptoms, as Class I and II. If the patient becomes significantly symptomatic, has hemoptysis or congestive heart failure, they are classified as Class III. More refractory symptoms would be considered Class IV. Surgery is not indicated for the asymptomatic Class I and II patients. Class III and IV patients should have surgery. The surgical mortality is much less in Class III patients, as they are not so sick.

Most surgeons feel that straightforward, uncomplicated mitral stenosis should be approached by the closed method for commissurotomy. Those patients who have *significant calcium in the valve, previous emboli which might indicate* the presence of thrombus in the atrium, *significant mitral insufficiency,* and patients who have had *previous operation* are generally approached with the open heart technique. If the valve can be repaired adequately, this is so done, and if not, a total prosthetic valve may be inserted. There is a trend to do all patients with mitral stenosis with the open technique, and as facilities become more available, this may become more standard.

5. *Aortic Valve:*

The aortic valve is also involved by congenital and acquired processes. As there is a rather high inci-

dence of sudden death in aortic stenosis without previous warning by heart failure, these lesions are approached seriously. The surgical repair of the aortic valve has been difficult. The presence of enough aortic stenosis to give left ventricular hypertrophy and the gradiant across the valve of more than 50 mm. of mercury pressure is enough to give consideration. In the older acquired aortic lesions, it is felt that if the patient once has congestive heart failure or significant episodes of syncope, surgery should be considered. In some of the younger patients with aortic insufficiency, repair of the leaflets themselves may be accomplished, but in most of the older patients with calcific aortic valve disease, total replacement with prosthesis is giving the best results.

Supravalvular aortic stenosis is anatomically similar to coarctation of the aorta just about the aortic valve. Many cases have some involvement of the supporting structures of the valve itself. This should be repaired, but care must be taken to insure proper valve function afterward.

Subaortic *membranous* stenosis is considered congenital and surgical repair has been satisfactory.

Subaortic *hypertrophic* stenosis causes grave concern with all involved. Adequate surgical approach has not been evolved.

6. *Pulmonary Valve:*

The pulmonary valve is primarily involved in congenital stenosis. This may be simple valvular involvement or it may be associated with infundibular stenosis. When the stenosis is significant enough to cause right ventricular hypertrophy, and/or right to left shunt in the presence of an atrial septal defect or ventricular septal defect, surgery is indicated.

Emory University Clinic
P. O. Box 459

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Council/June 13, 14, 1964

Voted to approve MAG Board and Committee appointments as made by the Executive Committee. (See pp. 272-273.)

Voted to approve recommendations made by Dr. Alexander: (1) Increased state appropriations for highway patrol; (2) Driver's license exam for persons over 50 years of age every five years; (3) Overspecialization in medicine; (4) MAG sponsored conference on medical education. Voted to henceforth refer incoming President's speech to MAG House of Delegates.

Submitted for approval by Dr. McDaniel, two resolutions: (1) that MAG go on record in support of an increased appropriation to the Department of Safety; and (2) that the MAG Council instruct its Legislative Board to assume responsibility for introduction and passage of legislation designed to protect the motorist through more stringent regulations in the issuing of drivers' licenses.

Recommended that Constitution and Bylaws of the new county medical society, to be known as Cook-Berrien County Medical Society, be referred to MAG attorney; be returned to society; and then approved by the secretary to be presented to September Council meeting.

Voted to approve the new Life of Georgia "insurance package plan," and to commend the Insurance and Economics Board for their work.

Voted that the method for transmission of the Relative Value Study be left to Executive Committee to be handled as inexpensively as possible; maximum of $175 to be taken from Contingent Fund, if necessary.

Voted to instruct the Board of Medical Education to investigate nursing education in Georgia, recommending policy and standards. Resolved that MAG urge the Nat'l Assn. for Practical Nurse Education and Service to feel free to call on MAG, AMA, hospital administrators and vocational educators for help in carrying out their accreditation program.

Defeated a motion to appoint or elect additional councilors and vice councilors for medical societies having a membership of 1,000 or more in lieu of MAG's legal council's opinion that proper procedure would have to wait until the 1965 Annual Session.

Referred to Council the following House of Delegates actions: (1) voted that physicians who are MAG but not AMA members be contacted by their Vice Councilors; (2) voted to refer to the Constitution and Bylaws Board the matter of evaluation of the affiliate membership status; (3) voted to disseminate the following information in a County Society Officer's newsletter: county medical societies encourage election of medical school faculty physicians and state health officers as county society representatives to the MAG House of Delegates; (4) voted that list of Annual Session cities be submitted to March Council meetings and that the list be reviewed annually; (5) voted to refer matter of training ancillary personnel for Georgia hospitals to the Clarkesville Lab Subcommittee.

Voted to recommend that the MAG President be given funds for in and out-of-state meetings other than Council and Annual Session meetings, with funds for such to be drawn from Office Travel; voted by Council that $1,500 be taken from the Contingent Fund and transferred to Office Travel.

Voted to publish the following letter in *JMAG* and in an Officers' Newsletter regarding physician ownership in repackaging drug houses:

"There are many ramifications of the question, and final analysis has not been delineated specifically by the AMA. Certainly there are many borderline or gray areas involved in the interpretation of the AMA original ruling. It is our belief that in the final analysis the decision will probably have to be made under the jurisdiction of the individual doctor's own conscience, that his ownership of stock or other interest involved not be in a questonable state.

It is our opinion that the essence of the problem is the protection of patients from exploitation, and the protection of doctors from compromising public relations.

May we quote again the present AMA ruling for your own information:

"It is unethical for a physician to have a financial interest in a drug repackaging company.

It is unethical for a physician to own stock in a pharmaceutical company which he can control or does control while actively engaged in the practice of medicine.

These practices are contrary to the best interest of the public and the medical profession.

The term 'repackaging company' as used by the Judicial Council and approved by the House of Delegates refers to a drug company which markets under its own label or trade names drug products manufactured by others with the objective that physicians having a financial interest in the drug company will prescribe its drugs to the patient."

Stated by Dr. Tift that MAG would submit a resolution to AMA opposing Social Security coverage for physicians, if necessary.

Voted that Executive Committee, with Dr. Spitzer and Dr. Walker, should re-evaluate the Annual Session program and report to the September Council meeting.

Reported that Georgia Hospital-Medical Council Nursing Home Standards Manuals are available at Headquarters Office.

DEATHS

EARL RASMUSSEN, 48-year-old Atlanta surgeon, was killed in an automobile accident June 24, 1964, near Savannah. Also killed were Mrs. Rasmussen and the couple's daughter, Lauren. A son was reported in critical condition in a Savannah hospital.

Dr. Rasmussen was a 1939 graduate of the University of Virginia Medical School. He served his internship at Emory University Hospital and served with the Emory medical unit in North Africa and Italy during World War II.

He was a member of the American Medical Association, Fulton County Medical Society and Medical Association of Georgia. He was a charter member and a past president of the Druid Hills Kiwanis Club and had been active with the Formwalt Girls Club and the Davison School of Speech Correction. In 1953 he was named a fellow in the American College of Surgeons.

SOCIETIES

J. T. Hogan, Jr., M.D., Macon, presented the first of a two-part program concerning the "Role of Religion in Medicine" at the recent monthly meeting of the BIBB COUNTY MEDICAL SOCIETY held June 2. A forum on the topic is planned later this year by the society, with L. E. Dickey, M.D., Charles R. Ireland, M.D. and R. M. Reifler, M.D. and local ministers participating.

C. H. Richardson Sr., M.D., presented the second part of a program on the admission policies of the Talmadge Memorial Hospital in Augusta. He said that the hospital is a tremendous adjunct to the Medical College of Georgia and deserves much praise.

Leo A. Erbele, M.D., chief pathologist at Macon City Hospital, Macon, Georgia, was guest speaker at the regular meeting of the DOUGHERTY COUNTY MEDICAL SOCIETY in May.

Dr. Erbele spoke on the subject of electrophoresis.

The SOUTHWEST GEORGIA MEDICAL SOCIETY held their regular bi-monthly meeting May 20, in Blakely. Speaker for the evening was H. F. Thompson, Americus pathologist.

PERSONALS

First District

No news submitted

Second District

No news submitted

Third District

Y. F. CARTER, JR. and H. GRADY WILLIAMS of Nashville have begun work on a new medical facility to be known as Berrien County Hospital, Inc. Dr. Carter formerly practiced in Ashburn and Dr. Williams is a native of that city.

C. RAY IVEY, JR., a native of Macon, has opened an office in that city for the practice of general medicine and pediatrics.

A. J. KRAVTIN has announced the opening of his offices at 1104 Third Avenue, Columbus. His practice is limited to infants, children and adolescents.

J. C. LOGAN, 84-year-old Plains physician, who "through his efforts has enabled many persons to return to work," was presented a lifetime membership by the National Rehabilitation Association in special ceremonies held at his home May 28, 1964. Dr. Logan was the recipient of the 1957 "General Practitioner of the Year Award" presented by the Medical Association of Georgia.

Fourth District

No news submitted

Fifth District

THOMAS J. ANDERSON, Atlanta, President of the Fulton County Medical Society, served as moderator of a medical forum on arthritis presented at the Academy of Medicine on June 7. Participants included DANIEL D. HANKEY, JOHN M. McCOY and F. JAMES FUNK. The medical and scientific committee of the Georgia Chapter, Arthritis and Rheumatism Foundation sponsored the meeting.

SIDNEY OLANSKY, Atlanta, addressed, on May 27, the regular monthly meeting of the Richmond County Medical Society, Augusta, on the subject, "Diagnosis and Management of Syphilis." On June 4, 1964, Dr. Olansky addressed the hospital staff and visiting staff of an Arlington, Virginia, hospital on the same subject.

Sixth District

No news submitted

Seventh District

SIDNEY L. SELLARS, Dalton, President of the Whitfield County Medical Society, has successfully passed all examinations for certification by the American Board of Obstetrics and Gynecology.

Eighth District

No news submitted

Ninth District

At a recent meeting of the Georgia State Obstetrical and Gynecological Society, ELTON L. COPELAND, Toccoa, was invited to become a member of the society. Dr. Copeland is associated with the Toccoa Clinic with his practice limited to OB-GYN.

Tenth District

MARION A. HUBERT announces the association of ROBERT E. SHIFTLET in the practice of urology, Medical Center, 1010 Prince Avenue, Athens, Georgia.

WALTON JOHNSON announces the opening of his office in Bowman, Georgia.

B. SHANNON GALLAHER, Augusta physician, has accepted an appointment as Clinical Director of the St. Barnabas Hospital for Chronic Diseases in New York City and Associate Professor in the Department of Medicine, Columbia University Medical College.

In private practice since 1959, Dr. Gallaher was recently inducted as a Fellow in the American College of Physicians. She has served on the faculty of the Medical College of Georgia for ten years and is a Fellow in the American College of Chest Physicians, as well as a Diplomate of the National Board of Medical Examiners and the American Board of Internal Medicine.

HARRY B. O'REAR, President of the Medical College of Georgia, addressed the graduates of the Medical College of South Carolina June 5, 1964, at Charleston, S. C. Dr. O'Rear's presentation emphasized that "it is time for those in the medical professions to join forces with the public to provide a better focal point for medicine."

Well-known Athens otolarygologist, A. PAUL KELLER, has been appointed Georgia State Chairman of the Deafness Research Foundation it was announced June 19, by Dr. Gordon D. Hoople, Medical Advisor to the foundation.

JAMES B. HUDSON, associate professor of medicine at the Medical College of Georgia, Augusta, has been appointed to the Georgia Heart Association Chair of Cardiovascular Research, and director of the Georgia Heart Association Laboratories in the college's teaching hospital (Eugene Talmadge Memorial Hospital). The new director succeeds J. EDWIN WOOD, III, who has held these positions since 1958.

The United States Public Health Service has awarded a $281,768 grant to the District Director of Public Health, Augusta, for the development and implementation of a program of maternity and child care.

Director of the program will be ABE J. DAVIS, Richmond County Public Health Officer and Associate Clinical Professor of public health at the Medical College of Georgia. Co-director will be DONALD E. O'ROURKE, instructor in obstetrics and gynecology at the Medical College. FREDERICK P. ZUSPAN, head of the college's Department of Obstetrics and Gynecology will serve as consultant.

1964-65 SLATE OF POSTGRADUATE COURSES DISCLOSED BY THE MEDICAL COLLEGE OF GEORGIA

An extensive schedule of postgraduate courses has been revealed by the Medical College of Georgia for the 1964-65 academic year. As announced by the college's Department of Continuing Education, courses will be offered in seven disciplines including blood banking, psychiatry, orthopedics, cardiology, obstetrics, gastroenterology, and chest diseases.

One To Three Days

The various sessions will range from one to three days in length, and will be offered for the benefit of practicing physicians in Georgia and adjacent states.

The schedule will begin October 3rd with a "Blood Banking Program" which will be coordinated by Dr. Walter L. Shepeard, professor of pathology and director of the blood bank in the Medical College's teaching hospital (Eugene Talmadge Memorial Hospital).

Twelve Evening Sessions

A course in psychosomatic medicine will be offered in a series of 12 evening sessions starting October 7th and continuing through December 23rd. The series will be directed by Dr. E. James McCranie, professor of phychiatry and chairman of the Department of Psychiatry and Neurology.

"Fractures in General Practice," a course offered for the past several years by the Division of Orthopedic Surgery, has been scheduled for November 10-12 under the supervision of Dr. Floyd E. Bliven, Jr., professor of surgery and chief of orthopedics.

A session on "Electrocardiography" will be presented January 19-21, 1965, with Dr. A. Calhoun Witham acting as coordinator. Dr. Witham is professor of medicine at the Medical College of Georgia and director of the cardiology service.

Dr. Frederick P. Zuspan, professor of obstetrics and gynecology and chairman of the department, will coordinate a course on "Concepts of Fetal and Maternal Welfare," to be offered March 2-3, 1965.

Collaboration

A surgeon and an internist will collaborate as coordinators for a three-day session on "Problems in Gastroenterology," scheduled for March 31-April 2, 1965. The surgeon is Dr. Edwin L. Brackney, professor of surgery, and the internist is Dr. Victor A Moore, Jr., associate professor of medicine.

Final Course

The final postgraduate course, planned for April 20-22, 1965, is titled "Concepts of Therapy in Chronic Pulmonary Diseases." Coordinators will be Dr. Curtis H. Carter, professor of medicine, and Dr. Robert G. Ellison, professor of surgery and chief of thoracic surgery.

BACK TO SCHOOL

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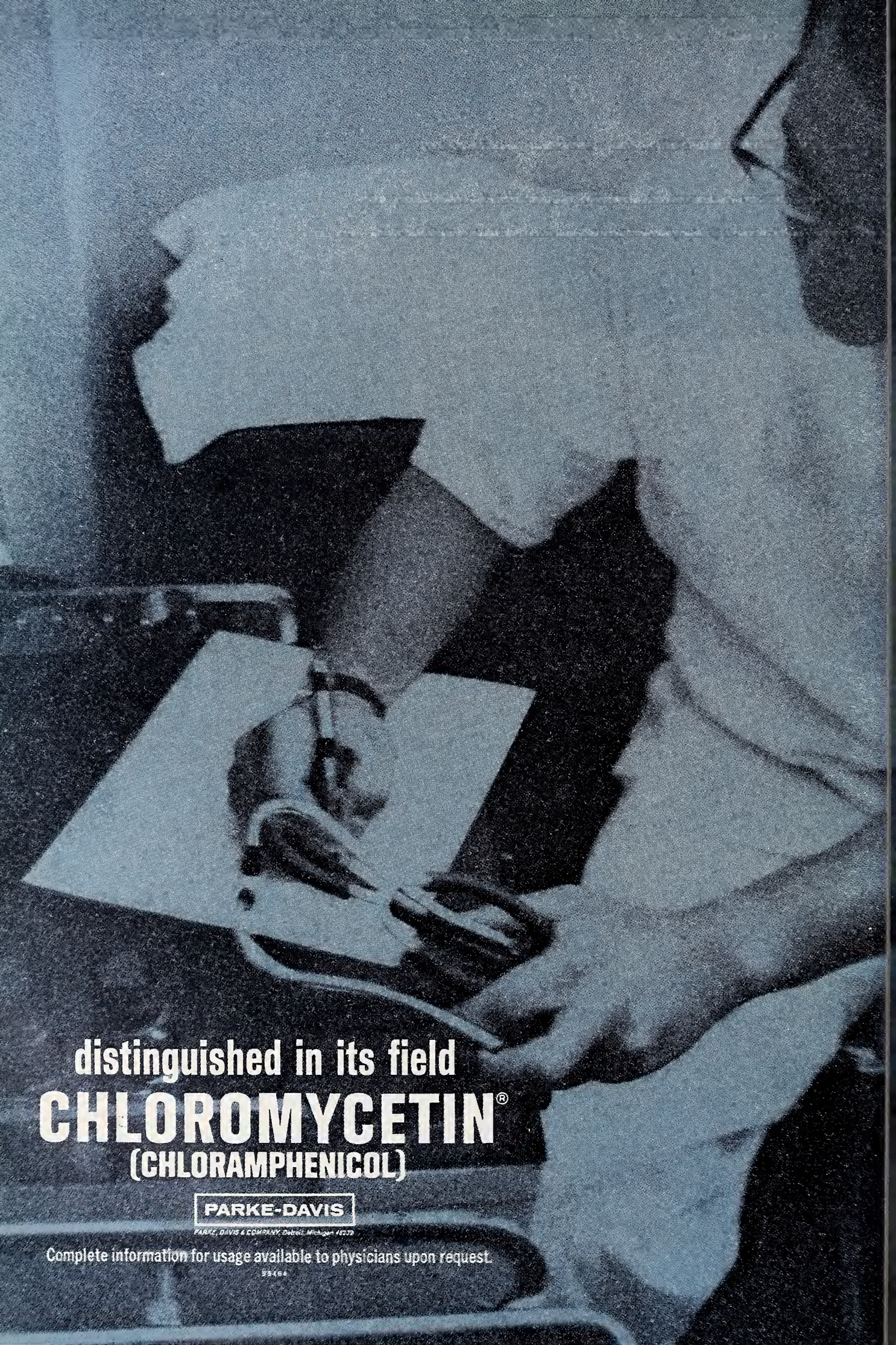
MORGAGNI'S SYNDROME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SEPTEMBER 1964 *Volume 53, Number 9*

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Georgia's medical schools — Woodruff Memorial Building, Emory University School of Medicine, Atlanta, and the Administration Building, the Medical College of Georgia, Augusta.

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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

THE TREATMENT OF ADVANCED CANCER WITH A COMBINATION OF 5-FLUOROURACIL, CYTOXAN, AND METHOTREXATE

Edgar D. Grady, M.D., *Atlanta*

■ ***Months and sometimes years have been added to the useful lives of some patients with the use of this therapeutic approach.***

THE RAPID DEVELOPMENT of cancer chemotherapy in recent years has made the treatment of advanced cancer a challenge rather than a frustrating experience to the present-day physician. It is difficult, however, to assess quantitatively the results of such treatment, since no two cases are alike, and since the patients usually have had surgery and irradiation before chemotherapy is applied. In spite of these obvious difficulties, there is little doubt from human and animal experience that combination chemotherapy often leads to longer remissions than the application of a single drug alone. In the present report, the combination of a structural pyrimidine analog, 5-Fluorouracil (5-FU), with a folic acid antagonist, Methotrexate, and an alkylating agent, Cytoxan, has been applied to 67 inoperable cancer patients, about 50 per cent of whom responded so favorably that a more detailed description of this method seems justified.

Previous Experimental Studies with Combined Cancer Chemotherapy

The results of combined chemotherapy in animal leukemias under controlled conditions were compared to single compound chemotherapy by various investigators.[1-4] Solid tumors in mice and rats were tested similarly.[5-10] All authors report greater tumor regression with their specific drug combinations as compared to single drug therapy. Even potentiating effects by a combination of several antimetabolites upon the proliferation of bacteria have been observed.[11] Besides such controlled and quantitative studies, attempts have been made also in clinical patients to assess the relative merits of various combinations of drugs versus single drug effects. Different authors report varying success, perhaps because the drug combinations were chosen randomly. The selection might have been made on the basis of familiarity rather than on the basis of specific interactions. Extensive studies were conducted in cancers of the ovaries,[12] breast and lungs,[13, 14] testicles,[15-18] uterus,[19, 20] and in leukemias.[21-23] Especially gratifying appeared the results with combinations of 5-FU and one or more alkylators in the treatment of breast cancer,[14] and of Methotrexate with an alkylator in cancer of the ovaries,[12] and of Chlorambucil with Methotrexate and Actinomycin-D[15] in testicular tumors. Choriocarcinoma responded more favorably to Methotrexate when 6-MP (6-Mercaptopurine) was added,[20] and the response of leukemias to treatment with folic acid antagonists was also enhanced by 6-MP.[21]

Selection of Drugs and Their Mode of Action

The combination of 5-FU, Methotrexate, and Cytoxan was chosen because these three compounds interfere with cell reproduction in three distinctly different ways. As long as there does not exist a more precise knowledge of metabolic differences between different types of cancer cells and their specific responses to available drugs, it was hoped to cover a wider spectrum of malignancies. There was also hope that the toxic side effects might sum up less than the therapeutic benefits.

5-FU, a fluorinated pyrimidine, is a structural analog of the naturally occurring pyrimidine bases, a certain percentage of which gets incorporated into the nucleic acids instead of uracil and thymine. The nucleic acids can no longer duplicate correctly, and cell proliferation ceases. 5-FU is believed also to interfere with the incorporation of formate and aortic acid into thymine, and also with the phosphorylation of uridine in the biosynthesis of the polynucleotides.[24]

Methotrexate is an enzyme inhibitor which specifically interferes with the enzyme "folic acid reductase" in the formation of tetrahydrofolic acid.

Presented at the Georgia Surgical Society, September, 1962, Sea Island, Georgia.

Since Methotrexate has an affinity to the enzyme about 1000 times greater than folic acid itself, the production of tetrahydrofolic acid comes almost to a standstill. This compound, however, is essential in the formation of co-enzymes which are required in several steps of nucleic and amino acid synthesis. In the biosynthesis of purine nucleotides, for instance, the conversion of glycine amide ribonucleotide into its formyl derivative no longer takes place, and in the synthesis of deoxyribonucleic acid the reaction of deoxyuridine phosphate and formaldehyde to make thymidylic acid, does no longer occur since both, synthesis and incorporation of formate, depend on tetrahydrofolic acid co-enzymes.[25]

Cytoxan, a cyclic phosphamide of nitrogen mustard, is an alkylating agent.[26] It is believed to be activated by two groups of tissue enzymes, the phosphatases and phosphamidases, and thus is relatively inert in the blood stream. Its cancerostatic effect is attributed to the two highly reactive alkyl groups which readily bind to the negatively charged phosphate groups of the polynucleotide skeleton, and also, though with less affinity, to the amine and hydroxyl groups of the purine and pyrimidine bases, as well as to the carboxyl, sulphhydryl, and alpha amino groups of the amino acids. It interferes with all phases of normal cell metabolism.[27] However, its predominant effect upon dividing cells seems to stem from the fact that each Cytoxan molecule has two active sites and thus can build bridges between different parts of one nucleic acid strand, or it can cross-link two different strands, whereby the genetic materials lose their freedom of action for replication and cell division. Alkylators seem to have an inactivating effect also on certain enzymes by binding to the active group or by distorting and breaking the enzyme molecules. Especially vulnerable are the phosphokinases, peptidases, choline oxidase, and acethylcholine esterase.

The action of these cytostatic drugs is, of course, not specific for cancer cells. They simply inhibit cell proliferation and thus affect especially the more rapidly growing tissues, such as most malignancies, the bone marrow, intestinal lining, and the hair follicles. Clinically, the desired effect of a standstill or shrinkage of the tumor mass often is accompanied by a depression of the white blood count, ulceration, bleeding and sloughing of the intestinal tract, alopecia, and sometimes dermatitis. There are some differences between the actions of the various anticancer agents; for instance, Methotrexate causes more hair loss than the others. Fortunately, all toxic side effects are readily reversible when the drugs are discontinued.

Present Clinical Routine and Results with Triple Chemotherapy

The author in surgical practice has had the opportunity of working with a variety of anti-cancer agents and of methods for their application.[29-34] The present program of triple chemotherapy was developed on the basis of theoretical considerations, as outlined above, and clinical experience with each of the three drugs individually.

Patients selected for chemotherapy may present one of the following conditions: (a) general widespread disease for which no other therapy appears appropriate, (b) metastatic malignancies evident or likely to be left over after surgery, and (c) large inoperable tumor masses that might decrease to an operable state upon chemotherapy.*

The following routine is applied: the patient is hospitalized for about one week. Physical improvement is attained by means of blood transfusions, bactericidal agents, cardiac or circulatory support, or whatever else might be indicated, prior to the chemotherapy.

5-FU is administered as a constant drip[35] through an indwelling venous catheter in an upper extremity. The dosage is 1000 mg of 5-FU with 5000 units of heparin in 1000 ml of glucose (5% in water) every 24 hours for five to seven days, if the patient and the catheter remain in satisfactory condition. The patient may get up and carry his i.v. bottle, on its stand, around with him.

Methotrexate and Cytoxan are given orally and are begun at the same time as 5-FU. The dosage for Methotrexate is two tablets of 2.5 mg each per day, and for Cytoxan two tablets of 50 mg each per day.

An anabolic agent such as Dianabol or Anadrol, also two tablets per day, is always given together with the cell poisons.[36-41] Corticosteroids are a useful adjunct in the treatment of breast cancer where pituitary depression is desired, and in lung cancers which often are accompanied by stasis and inflammatory or allergic bronchitis. Also, post-irradiation reactions may respond favorably to corticosteroids. Diuretics are prescribed where needed.

The white blood count and hemoglobin are determined upon admission and thereafter daily from the third day of chemotherapy. The trend is more important than the actual count. A drop from 10,000 to 5,000 requires a more drastic reduction of dosage than does a drop from 7,000 to 5,000. Medication is decreased also if other toxic effects occur such as soreness of mouth, substernal pain, diarrhea, or nausea and vomiting. Methotrexate and 5-FU are the primary irritants of the gastrointestinal tract, and their dosage may be reduced alone. If,

** In the author's practice, leukemias and other non-surgical malignancies are rarely seen and are not being treated.*

however, a dangerous drop of the white blood count occurs, all three drugs must be decreased until the patient has recovered. It is advisable to decrease each drug to one-half of its initial dose, to one ampule (500 mg) of 5-FU, one tablet (2.5 mg) of Methotrexate, and one tablet (50 mg) of Cytoxan. These simple rules of medication are extremely important for the safety of the patient, especially in cases where doctor and nurses supervise the chemotherapy of several patients at the same time.

After one week the patient might be treated as an outpatient if his medication has been well adjusted to his tolerance. A white blood count of 3,000 to 5,000 with no adverse reaction of the gastrointestinal tract is ideal. He is then seen twice a week in the office where he gets 500 mg of 5-FU (or less, as the case may be) i.v. with an ordinary syringe injection, and he takes daily his Methotrexate and Cytoxan. This routine is usually continued for a total therapeutic period of four weeks. If another mode of therapy is contemplated, such as more surgery, irradiation or chemotherapy, the patient is first given one month of rest. A second course of chemotherapy might be initiated on an outpatient basis. If tolerance or results of the first course are not satisfactory, other chemical agents may be tried. Everything potentially hopeful is being explored as long as the patient is willing to try for improvement and understands his situation.

Sixty-seven patients have been treated, so far, with triple chemotherapy (Table I) (See following page). All of them had wide-spread metastatic disease, and most of them had been treated with radiation and surgery before they were given chemotherapy. The subjective well-being improved in 41 of them, and in 26 the palpable tumor mass regressed drastically. Definite help with a gain in useful time, however, was experienced predominantly in those who had metastatic cancers of the ovaries, breast, or uterus. Only one of the patients with liver metastases from a primary intestinal cancer and one with lung cancer had remissions lasting more than six months, though temporary pain relief and well-being could be established in six of them. One huge liver filled with metastatic breast cancer has apparently returned to normal.

Two case reports have been selected from the first group to demonstrate the rewarding results obtainable in patients who are determined to keep trying.

In a 65year-old lady, a grossly inoperable frozen mass of papillary cystadeno-carcinoma of the ovary could be reduced to operable size by triple chemotherapy. She was biopsied, at laparotomy, three years ago. Then, she had triple chemotherapy extending over ten weeks. The tumor mass decreased greatly. Six weeks after the chemotherapy she was given 400 mc of particulate Yttrium-90 into the aorta above the celiac artery for intrapelvic beta irradiation. Two months later no palpable tumor mass was left, discomfort was insignificant, and she pursued most of her normal daily routines. After another 12 months, a small pelvic mass recurred. During a second laparotomy all gross disease could be removed, including uterus, adnexae, and a segment of the colon. A few obvious cancer implants were left in the peritoneum for which she received cobalt irradiation. Thirty-six months after the first treatment, the patient developed recurrent disease again and finally died with kidney failure.

In another patient, a 43-year-old lady, widespread metastatic breast cancer could obviously be controlled. She had a routine mastectomy, three years ago, after which external cobalt irradiation was applied to the supraclavicular and mediastinal regions. The ovaries were removed prophylactically. Three months later, pleural effusions developed in which malignant cells were found. She was given systemic triple chemotherapy and intra-pleural nitrogen mustard. Dianabol, Prednisolone, and thyroid extract were added, the latter for pituitary depression. The effusions were well controlled for three months. However, pulmonary metastases developed bilaterally for which intravenous Yttrium-90 was given in particles large enough to lodge in the lungs. She felt well for ten months. Then, metastases developed in the other breast and in adjacent subcutaneous tissues. She did not respond well to additional irradiation, but another course of chemotherapy, this time with Vinblastine and Actinomycin-D, was effective. The patient is fully active, at present, and has no detectable disease. She is scheduled for another prophylactic course of chemotherapy.

Discussion and Conclusions

The clinical routine for cancer triple chemotherapy as outlined in the present report, has been developed by cautious trial and error. Especially beneficial, aside from the great simplicity of this routine, appear the application of 5-FU as a constant drip infusion, which makes it more tolerable[35] and the combination with anabolic agents to achieve a positive protein balance[36-41] in the patient. Even in cases where the life of a patient could not be extended, his sufferings appeared less with the palliation achieved by chemotherapy than with intermittent narcotics.

Anticancer drugs, especially in large doses as suggested here, do add to the bone marrow depression from radiation therapy to which most patients have been exposed before they receive chemotherapy. Quantitative studies seem not to be avail-

TABLE I

PRIMARY LOCATION OF MALIGNANCY	NUMBER OF PATIENTS	METASTATIC REGION	OBJECTIVE AND SUBJECTIVE REGRESSION	DURATION OF REGRESSION
Colon	10	Liver (3)	Little	0, 0, 6 mo
		Abdomen & Liver (2)	Good	4 + mo*, 8 mo
		Abdomen (3)	2 good, 1 poor	2, 3, 4, mo
		Pelvis (2)	Excellent	Control for 3 & 6 mo
Breast	13	Bones & lungs (3)	Good & excellent	2 mo, 2yrs, 4 + mo
		Chest wall & neck (4)	Excellent	10 mo, 3 + yrs, 3 + mo, 2 + mo
		Lungs & chest wall (1)	Excellent	3 + yrs
		Bones (2)	Good	4 mo, 3 mo
		Lungs, chest wall & neck (1)	Excellent	7 + mo
		Liver (1)	Poor	0
		Liver & bones (1)	Excellent	4 + mo
Ovary Papillary and Systo-Adeno-Carcinoma	9	Abdomen & pelvis	All good to excellent	3 mo, 4 mo, 6 mo, 13 mo, 14 mo, 18 mo, 22 mo, 38 mo. 8 died after good rehabilitation. One patient is apparently free of disease 5 mo after treatment.
Lung	9	Lung & mediastinum (4)	None for 3 excellent for 1	0, 0, 0, 18 mo
		Lung & bone (1)	None	0
		Both lungs (1)	Fair	3 mo
		Lung & chest wall (1)	0	
		Lung & axilla (1)	0	
		Lung & brain (1)	Good	2 + mo
Ewing Sarcoma Bone	4	Lung (3)	2 excellent, 1 good	6 + mo, 3 + mo, 8 mo
		Skull (1)	Good at first	8 mo
Cervix	3	Pelvis (1)	Good	24 mo
		Pelvis & skull (1)	Good	12 mo
		Pelvis & abdomen (1)	Good	2 mo
Endometrium	2	Pelvis (1)	Excellent	36 + mo
		Pelvis & lungs (1)	Poor	0
Stomach	3	Liver (2)	Good temporarily	2 mo, 4 mo
		Liver & lungs (1)	Poor	0
Bile ducts	3	Liver (2)	Poor	0
		Liver & abdomen (1)	Good	5 mo
Kidney (Renal cell)	2	Bones (1)	Poor	0
		Neck & lung (1)	Excellent	12 + mo
Urinary Bladder	2	Pelvis, bones (1)	Good	8 mo
		Bladder neck (1)	Excellent	6 + mo
Melanoma	2	Liver & lungs (1)	None	0
		Abdomen (1)	None	0
Unknown adeno-carcinoma	2	Lungs, abdomen, brain (1)	Good	2 mo
		Pelvis & bones (1)	Poor	0
Testicle (Embryonal cell)	1	Abdomen & lungs (1)	Slight	3 mo
Pancreas	1	Pancreas & liver (1)	Excellent	3 + mo
Vulva	1	Lungs (1)	Excellent	1 + mo
Esophagus	1	Liver & abdomen (1)	Poor	0

* 4 + means that the patient's treatment began 4 months ago and he is doing well at present.

able. Yet, the danger of an accumulated depression of the bone marrow has become less since gamma radiation, today, can be better localized, and since intra-arterial beta emitters, such as Yttrium-90, have been introduced into local cancer therapy. Moreover, triple chemotherapy appears to do less harm to the bone marrow than any of the three drugs alone, when given in a threefold dose.

The effects of triple chemotherapy, like those of any other measure against cancer, depend primarily on the site and cell type of the malignancy, and upon its state of progression. At least in metastatic, inoperable cancers of breast, ovary, cervix uteri and endometrium, this therapy has undoubtedly added months and even years to the useful life of several patients. Yet, today's cancer chemotherapy in general is still considered a last resort therapy with few exceptions, and this is an unfortunate state for patients and physicians. However, since new drugs are being developed and tested continuously, a better knowledge and earlier successful application of anti-cancer drugs will eventually ensue. Statistical and experimental studies in patients, like the present one, or the investigation of drug effects on human malignancies in cell cultures, will lead towards this goal. In the meantime, more physicians who at present are not optimistic enough to treat the incurable ones, may be stimulated to share in this worthwhile effort. In this respect, the present report may also have added some encouragement.

Summary

Sixty-seven inoperable cancer patients were treated with a combination of three different anti-cancer drugs, 5-FU (5-Fluorouracil), Cytoxan (Cyclophosphamide), and Methotrexate (Amethopterin). In 41 patients, regression of the tumor masses was significant, and temporary rehabilitation with control of pain was gratifying. The longest remissions, two and three years, were achieved in metastatic cancers of breast, ovary, and uterus. Malignancies originating in the lungs and in the intestinal tract, with metastases to the liver, could be palliated in some cases but regressions, if any, rarely lasted more than six months. It is hoped that the results, especially in ovarian and breast cancers for which other investigators also have reported most favorable responses to various drug combinations, might encourage wider application of combined chemotherapy. The clinical routine of the present triple chemotherapy is described and its biochemical actions and toxic side effects are discussed.

1938 Peachtree Road, N.W.

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1964 CALENDAR OF MEETINGS

State

September 20-21—Scientific Sessions of the Georgia Heart Association, Augusta Town House, Augusta.

November 2-5—Postgraduate course on Fractures and Other Injuries sponsored by the Committee on Injuries of the American Academy of Orthopedic Surgeons, Riviera Motel, Atlanta.

October 8-9—Sixteenth Annual Session, Georgia Academy of General Practice, Augusta Town House, Augusta.

May 2-4, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

September 24-26—Dixie Postgraduate Assembly, Dauphin Island (Mobile) Ala.

September 25-26—American College of Obstetricians and Gynecologists, (District 7), Dinkler-Tutwiler Hotel, Birmingham, Ala.

September 26-27—Congress on Occupational Health, Rice Hotel, Houston, Tex.

September 28-29—Tennessee Valley Medical Assembly, Tivoli Theatre, Chattanooga, Tenn.

October 2-4—American College of Obstetricians and Gynecologists (District 4), Robert Meyer Hotel, Jacksonville, Fla.

October 22-24—Symposium on "Modern Concepts of Nutrition and Heart Disease," sponsored by the Mound Park Hospital Foundation, Inc., St. Petersburg, Fla.

November 16-19—Fifty-eighth Annual Meeting, Southern Medical Association, Memphis, Tenn.

November 29—Sixth National Conference on the Medical Aspects of Sports, in conjunction with the AMA Clinical Meeting, Miami Beach, Fla.

November 29-December 2—American Medical Association Clinical Meeting, Auditorium and Exposition Hall, Miami Beach, Fla., and the Americana Hotel, Bal Harbour, Fla.

National

November 9-21—Postgraduate course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine, Illinois Eye and Ear Infirmary, Chicago.

A BALANCED OPERATION FOR ACHALASIA

Milford B. Hatcher, M.D.
Thomas H. Williams, M.D.
W. Morris Brown, Jr., M.D., *Macon*

■ ***In the authors' experience fewer complications have been encountered with this procedure.***

ACHALASIA of the esophagus is a disease characterized by an absence of a distally traveling peristaltic wave in the body of the esophagus and a failure of the cardio-esophageal junction to relax. It is our object to call to your attention a surgical treatment which, in our opinion, is a balanced operation for this condition.

The Diagnosis

This paper does not intend to present a full discussion of the etiology, symptoms, and differential diagnosis of achalasia, nor the various forms of medical therapy and/or bougie, hydrostatic, or pneumatic dilations. In general, the symptoms consist of dysphagia, substernal or epigastric pain, usually after swallowing, and regurgitation of food or liquids. The diagnosis is generally considered from the history and confirmed by esophogram and/or esophagoscopic examination.

The modified Heller procedure, or esophago-cardiomyotomy, is generally accepted as the surgical treatment of choice for patients with achalasia of the esophagus. Approximately ten per cent of all patients who have had the Heller procedure have regurgitation of gastric contents with concomitant esophagitis. Thus, inflammatory and vascular changes with possible erosion, ulceration, and a fibrous stricture may form. Which patients will be thus effected cannot be determined beforehand in spite of measuring gastric acidity and history of previous ulcer or ulcer symptoms. Sweet states that in a few patients there seems to be a simultaneous derangement of pyloric function.

Because of these uncertainties, in recent years we have been performing a so-called balanced operation on all patients with achalasia who have not responded to medical management. Admittedly, our series is small, and our follow-up is short.

In brief, our technique is as follows:

An upper midline abdominal incision is made, and thus far we have not found it necessary to extend the myotomy cephalid further than this exposure will allow. The terminal esophagus is mobilized for approximately ten cm. The vagus nerves are identified, and a segment of approximately one inch is removed from each. If the hiatus is enlarged, then a routine repair of this is made by the Allison technique. The myotomy is begun on the anterior wall of the esophagus, incising the circular fibers for approximately eight cm. above the esophago-gastric junction and three cm. distal to the junction on the gastric side. The fibers are then spread bluntly until the mucosa bulges through. A pyloroplasty is then performed either by the Ramstedt, Finney, or the Heineke-Mickulicz type. A gastrostomy tube is then placed in the stomach and the incision closed with or without drainage, depending upon the surgeon.

Summary

In summary, we feel that this is a balanced operation and alleviates the symptoms and decreases the possibility of complications. The vagus nerves are divided to control the hyperacidity; the esophago-cardiomyotomy to relieve the obstructive factor at the cardia; a repair of the hiatus, as in a hiatus hernia, to reconstruct the angle of Hiss and the lasso of Allison; a pyloroplasty to decrease the emptying time of the stomach; and the gastrostomy tube to relieve any gastric distention (replacing the old

Presented at the 110th Annual Session of the Medical Association of Georgia, May 5, 1964, Macon, Georgia.

Wangensteen naso-gastric suction). In our small series of cases, there has thus far been no mortality or marked morbidity. In our short follow-up both we and the patients have been extremely pleased. There have been no cases of esophagitis following our procedure, and the patients have been able to eat all foods satisfactorily.

Thus to paraphrase thereon, the man with achalasia truly leads a life of "quiet desperation," and perhaps with this procedure we may allow him internal peace.

781 Spring Street

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STROKE CONGRESS IN CHICAGO TO BE A FIRST

The First National Congress on Strokes, designed to stimulate a wide-spectrum program of prevention and management of strokes and rehabilitation of stroke patients, has been scheduled for October 29-31 at the Palmer House in Chicago.

Sponsoring agencies are the American Medical Association, American Heart Association, Heart Disease Control Program of the U.S. Public Health Service, and the Vocational Rehabilitation Administration of the Department of Health, Education and Welfare.

Following the opening session Thursday, the epidemiology, diagnosis and prevention of strokes will be discussed by Champ Lyons, M.D., The University of Alabama Medical Center; Jeremiah Stamler, M.D., Chicago Board of Health; Irvine H. Page, M.D., Cleveland, Ohio; Clark H. Millikan, M.D., Mayo Clinic, Rochester, Minnesota; Robert N. Baker, M.D., Veterans Administration Center, Los Angeles, and Michael E. DeBakey, M.D., Baylor University College of Medicine, Houston.

Panel sessions on the care of the early stroke patient will be held Thursday afternoon and Morris Fishbein, M.D., will speak at the Congress banquet that night.

Friday's session will include a discussion on convalescent and continuing care of the stroke patient by David Frost, M.D., Vocational Rehabilitation Administration, Washington, D.C.; Edward E. Gordon, M.D., Michael Reese Hospital, Chicago; David Gelfand, M.D., Philadelphia; Fredrick J. Sparkman, M.D., Division of Vocational Rehabilitation, Olympia, Washington.

Television demonstrations and "fireside" panels will also be held Friday.

Saturday morning's session will be devoted to "Community Programs for Stroke." Speakers will include Mathew Lee, M.D., New York University Medical Center; J. Gordon Barrow, M.D., Georgia Department of Public Health; John A. Lichty, M.D., Colorado Department of Public Health, Sylvia R. Peabody, Visiting Nurse Association; and Louis deBoer, Chicago Heart Association.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Council / July 19, 1964

Proposed 1965 MAG Annual Session Program — Thomas Q. Spitzer, Chairman. Major changes in the program format to include:

(1) Combining the MAG Business Sessions with the Association's House of Delegates meetings; (2) Shortening the Annual Session by excluding the Wednesday morning portion; (3) Changing the MAG President's Banquet from Tuesday night to Monday night, and rescheduling Alumni banquets from Monday to Sunday night; (4) Improved scheduling of the joint scientific section meetings over the entire two and a half day period of the Annual Session; and (5) Scheduling all MAG activities under one roof in the Augusta Town House.

Voted to approve the floor plan and program.

Voted to request appointment of a committee to meet with Mrs. Frances Edmondson, Augusta Vocational School, to discuss details of a forum for teachers of medical secretaries.

Appointed to MAG Committees:

(1) *Subcommittee on Crippled Children:* Ruth M. Waring, Savannah, Chairman; L. E. Dickey, Macon, member.

(3) *Subcommittee on Relative Study:* Harry Pinson, Chairman, to appoint someone in Robert E. Cato's place.

(4) *Subcommittee on Mental Health:* 6th District member, Z. S. Sikes, Macon.

(5) *Subcommittee on Rehabilitation:* W. O. White, Augusta, member.

Georgia Hospital-Medical Council: J. M. Kellum, Thomaston, appointed to represent MAG, as Dr. Alexander must resign due to pressure of duties.

Report on Legislation:

(1) H.R. 11865, increased Social Security Cash benefits for citizens, will also include physicans under compulsory coverage.

Voted to recommend that a proposed eugenic sterilization law bill be referred to the Legislative Board for proper action.

Received for information—Conference for medical educators and practicing physicians to be held January 29-31, 1965, at Callaway Gardens, Pine Mountain, Ga.

Voted to table idea of holding 1965 Projects Meetings in Jamaica; meeting to be held instead at Callaway Gardens, Pine Mountain, Ga.

Report on excellence of Georgia Hospital Association Progressive Care Meeting held July 10-12 at Athens. Dr. Mauldin urged that MAG members attend in the future.

THE CURIOUS SYNDROME OF DOCTOR MORGAGNI

John A. Ward, M.D. and Nicholas E. Davies, M.D., *Atlanta*

■ ***It is important to differentiate this syndrome from more serious conditions.***

In the year 1765, Dr. Morgagni, Professor of Anatomy at the University of Padua, described the intriguing syndrome that bears his name. A case history is recorded in Benjamin Alexander's[1] translation of Morgagni's *The Seats and Causes of Diseases* published in 1769. The subject was a 75-year-old lady described as obese, querulous, and having a "manly aspect." It was felt that her complaints were greatly exaggerated, particularly in her later life. On postmortem examination, the os frontis was noted to be prominent with frequent tuberosities.

In 1928 Stewart[2] described five autopsied cases of hyperostosis frontalis interna in the insane. Three of these cases were obese hirsute females and the other two were obese males.

Ferdinand Morel[3] in 1930 diagnosed the condition in a living subject. Thus the Morgagni-Stewart-Morel Syndrome is comprised of hyperostostosis frontalis interna, obesity, hirsutism and/or neuropsychiatric abnormalities. Although a number of articles have been written about this syndrome,[4-10] some authors have challenged the concept that any clinical entity is related to hyperostosis frontalis interna.[11]

Material

This study is comprised of 17 female patients who met the criteria for inclusion in the Morgagni Syndrome. Six of these were Caucasian and eleven were Negro. These patients were referred to the authors from the wards, clinics, and Radiology Department of Grady Memorial Hospital.

In reviewing case histories, one is impressed with the frequency of complaints of headaches (88.2%) and menstrual difficulties (84.6%). These complaints were noted by Carr[12] in 82.3 per cent and 76.4 per cent respectively. Arterial hypertension occurred in 62.5 per cent of these patients. Two patients had a diagnosis of epilepsy. The occurrence of a high hemoglobin seen in some of these female patients may well have been an accompaniment of obesity. While pendulous breasts were noted in eleven patients, the significance of this in obese women is questionable.

Endocrine Determinations

In a series of nine cases of hyperostosis frontalis interna, Notkin[13] reported five patients with diabetes mellitus or with diabetic glucose tolerance curves. In the present series, 11 of 17 (64.7%) were diabetic, two of 17 (11.7%) had a doubtful two hour blood sugar and only four (23.5%) had a normal glucose tolerance test. The tendency toward an elevated serum cholesterol may have been related to diabetes mellitus or hypothyroidism. One patient had myxedema. Three patients had elevated 24 hour urinary 17-keto-steroid excretion studies in previous years, but had normal determinations when repcated at later dates. Three patients had elevated serum calcium concentrations but further studies did not reveal hyperparathyroidism. One patient was thought to have Cushing's disease but was lost to follow-up

Table I

SUMMARY OF OBSERVATIONS

PATIENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
SKULL HYPEROSTOSIS	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
OVER WEIGHT	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
HIRSUTE	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
HEADACHE	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+
MENSTRUAL DIFFICULTIES	+	+	+	+	+	+		+	+	+	+	+		+			
BLOOD	170	250	170	140	140	210	300	130	160	160	190	250	190	160	250	120	
PRESSURE	110	120	110	70	80	120	180	75	80	90	110	140	110	100	100	80	
EPILEPSY		+							+								
RACE	W	W	C	W	W	C	C	C	C	C	W	W	C	C	C	C	C

TABLE II
ENDOCRINE DETERMINATIONS

PATIENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	NORMAL
Fasting Blood Sugar or Glucose Tolerance Test	DM	N	DM	DM	N	DM	? 2 hr sug.	DM	DM	DM	DM	N	? 2 hr sug.	DM	DM	N	DM	60-100 mg%
Cholesterol	144	140	155		321	320		350		480	360		600			163	304	150-250 mg%
PBI	8.4	5.8		4.4	8.2			8.1	8.2	5.8			0.2			7.7	7.2	4-8 mcmg%
17 Ketosteroids	10.5	7.3		9.6	5.4	3.3	5.1	6.2	5.0	3.0	5.7		12.4					5-15 mg/24 hrs.
Endocrinopathy	DM		DM	Cushing		DM		DM	DM	DM	DM		Myxedema	DM	DM		DM	

DM—Diabetes Mellitus
N—Normal
? 2 hr. sugar—2 hour blood sugar slightly elevated

and did not have elevation of 17 ketosteroids. Certainly diabetes mellitus was a frequent endocrinopathy in this group of patients.

The etiology of the syndrome is unknown. Stewart suggested that this disorder is a manifestation of a form of dyspituitarism. Sherwood Moore[4] attributes the syndrome to unknown growth stimuli and suggests the possibility of abnormal gonadotrophic hormone secretion.

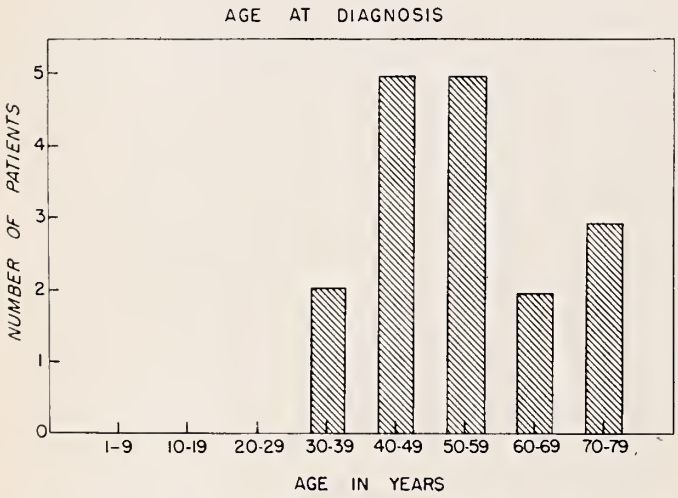

FIGURE 1
AGE DISTRIBUTION WHEN DIAGNOSIS MADE.

Hyperostosis frontalis interna is not an uncommon roentgenographic finding in older females. Without the other components of the syndrome, they should not be included in the Morgagni Syndrome. In general, this is a syndrome of older people as can be seen in Figure 1. The syndrome does not seem to decrease longevity but must be differentiated from more serious conditions as illustrated by the following case:

A 52-year-old slightly obese white diabetic female with mild facial hirsutism was admitted in a semi-comatose state. Skull X-rays were interpreted as showing hyperostosis frontalis interna. (See Figure 2). Because her physical findings suggested organic central nervous system disease, a lumbar puncture was done which showed an elevation of the cerebrospinal fluid protein at 221 mg. per 100 ml. Ventriculogram outlined a frontal meningioma which was subsequently removed successfully.

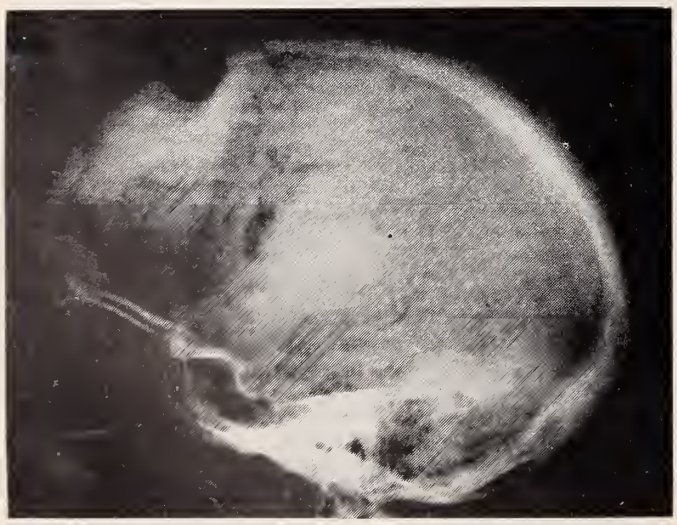

FIGURE 2
SKULL X-RAY OF PATIENT WITH FRONTAL MENINGIOMA. BURR HOLES HAVE BEEN MADE FOR VENTRICULOGRAMS.

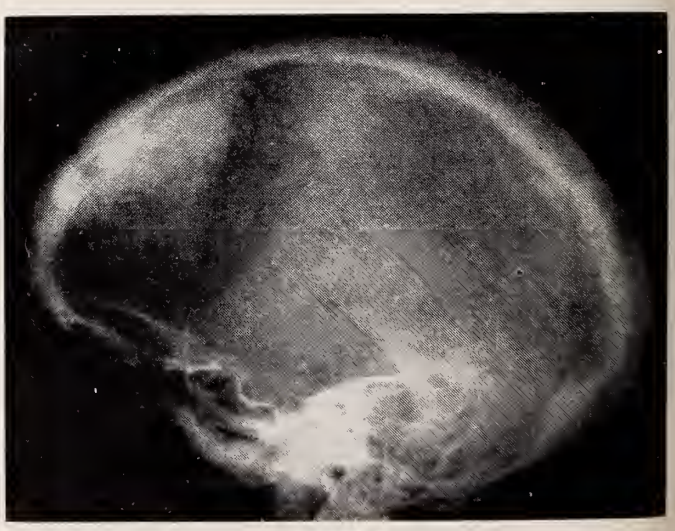

FIGURE 3
SKULL X-RAY OF PATIENT SHOWING HYPEROSTOSIS FRONTALIS INTERNA WITH THE MORGAGNI-STEWART-MOREL SYNDROME.

Summary and Conclusions

1. Some clinical and metabolic observations are presented on 17 female patients who meet the criteria for inclusion in the Morgagni Syndrome. The criteria are hyperostosis frontalis interna, obesity, hirsutism, and occasionally neuropsychiatric disturbance.

2. When the diagnosis of the Morgagni Syndrome is made, accompanying endocrine disorders should be excluded, particularly diabetes mellitus.

3. The Morgagni Syndrome must be differentiated from more serious conditions such as frontal meningioma.

Medical Arts Building

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TENTATIVE PROGRAM SET FOR 16TH GAGP ANNUAL MEETING

This year's 16th Annual GAGP Program is being made possible by a grant from the Merck Sharp and Dohme Postgraduate Program for the purpose of furthering postgraduate medical education. The 1964 meeting will take place at the Town House Motor Hotel in Augusta, Thursday and Friday, October 8 and 9. Thursday's schedule, taking place in the Grand Ballroom, is as follows: 1:00 p.m.—Registration; 1:30 p.m.—GAGP General Business Session, Albert Morris, M.D., President, GAGP, Presiding; 2:00 p.m.—Scientific Session (1) "Emotional Problems in Obstetrics and Gynecology," Eugene Griffin, M.D., Atlanta; (2) "Endocrinology and the Emotions," Robert Greenblatt, M.D., Augusta; (3) "General Practice and the Psychiatrist," James McCranie, M.D., Augusta; and (4) "Critique of Emotional Problems in General Practice," a panel discussion led by Dr. Morris. After the Scientific Session, which will recess at 5:00 p.m., there will be a "Dutch Treat" social hour preceding the GAGP Annual President's Banquet at 8:00 p.m.

Friday, October 9, opens its session again in the Grand Ballroom at 9:00 a.m. with the second General Business Session presided over by Dr. Morris. At 9:20 a.m. the second go-round of scientific sessions begins: "Urinary Tract Infections in Children," Ralph Straffon, M.D., Cleveland, Ohio; "What Viruses Are Producing These Peculiar Syndromes?", Arthur White, M.D., Augusta; "Diagnosis and Treatment of Convulsive Disorders in Children," Richard J. Allen, M.D., Ann Arbor, Michigan; "Chronic Pulmonary Disease," William Hopkins, M.D., Atlanta; and "Recognition of Collagen Disease," John Haserick, M.D., Cleveland, Ohio. Adjournment is at 12:15 p.m. Friday.

SPORTS ENTHUSIASTS CONVENE IN ATLANTA FOR MEDICAL ASPECTS SEMINAR

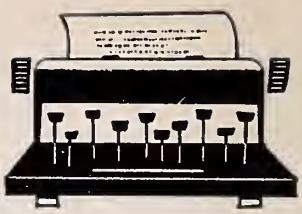
A sizeable group of coaches, physicians, trainers and educators gathered in Atlanta August 7, 1964, at the Academy of Medicine for a postgraduate course on "The Medical Aspects of Sports." Sponsored by the Medical Association of Georgia in cooperation with Georgia's High School Association, Athletic Coaches Association, Department of Public Health, Department of Education, Dental Association, and the American College of Sports Medicine, the course was chaired by Fred Allman, M.D., Atlanta, and Jack C. Hughston, M.D., Columbus.

Marcus J. Stewart, M.D.

Program speakers and their topics included Atwood M. Freeman, Jr., M.D., Albany, "Technique of Field Examinations and Decisions;" George S. Whatley, M.D., Columbus, "The Sprained Ankle;" Mr. Kenny Howard, Trainer for Auburn University, Auburn, Alabama, "Pulled Muscles;" and Marcus J. Stewart, M.D., (see cut), Guest Speaker and Orthopedic Consultant for Ole Miss and Memphis State, Memphis, Tennessee, "The Knee in Athletes."

The afternoon session highlighted Dr. Stewart, again, speaking on "The Requirements of Return to Athletic Participation-Rehabilitation;" Mr. Sam Burke, President, National Federation State High School Association, Thomaston, "Injury Prevention;" Mr. Richard Copas, Trainer, University of Georgia, Athens, "Training Room Records;" and Fred Allman, M.D., Atlanta, "Conditioning for Athletics." A critique was held at the end of the day's session.

EDITORIALS



Problems of Progress in Mental Health

In Georgia we can now begin to see signs of progress in our mental health program. However, this is not without considerable effort to meet realistically and with determination a good many problems of planning and building. We are not traveling on a super-highway, but it is certain that we have struggled free from the quagmire of indifference, complacency, ignorance and neglect of the most prevalent and crippling human ailments. Mental illness and mental retardation still deserve much more attention by many more people.

Common To All

Studies which have been made on national and local levels have pin-pointed some probelms common to all states and communities. The most significant of these on our road of progress are: (1) More active and intensive programs of prevention of mental illness and retardation; (2) Better education about and knowledge of these illnesses; (3) Early recognition, professional guidance and treatment without fear, prejudice or embarrassment; (4) Training of psychiatric personnel; (5) For the private as well as the indigent patient adequate outpatient and inpatient facilities and services available on the community level for adults and children; (6) Rehabilitative and after-care programs; (7) Methods of financing community mental health and mental retardation centers; and (8) Voluntary health insurance benefits providing coverage for mental illness equal to that for any other illness.

In 1962 the First A.M.A. National Congress on Mental Illness and Health emphasized the urgent role which all physicians should have in their state mental health programs. With active participation they must provide the scientific leadership which is necessary in the organization of community programs, centers and services, and in the coordination of all groups in the community working toward the establishment of such programs. This is one problem of progress about which physicians and their wives can do a great deal more at this time.

Under the active and able guidance of Dr. Addison Duval, Director of the Division of Mental Health, Georgia's mental health and mental retardation planning program is under way. In addition to his enlarged full-time staff, a Technical and Scientific Advisory Committee with 20 members has been selected. Medical and psychiatric groups of the state are well represented by a total of eight physicians, three of whom are full-time Health Department staff members; two are internists and two are psychiatrists in private practice, and one represents the county health physicians. Other members represent the clinical psychologists, social service workers, nurses, the legal profession, the ministry, and the mental health associations. Others are to be added to this committee to broaden the representation in the area of mental retardation. This committee is meeting regularly with Dr. Duval's staff to discuss and assist in planning for the implementation of effective mental health and mental retardation programs throughout the state.

Institute In Atlanta

Another problem of progress which is being met effectively is the staffing of the new Georgia Mental Health Institute in Atlanta. Dr. J. F. Casey, the Medical Director, arrived about July 1 and is busily engaged in acquiring competent personnel for clinical services, training and research. All physicians can assist in encouraging intelligent and interested individuals to consider some area of the broad mental health field as a vocation. It is well known that the majority of those who receive local training will seek local employment. State scholarships for specialized education and training must be broadened, and current legislation to make this possible should be actively supported. The Mental Health Institute will be an outstanding investment by our state in this area of education and training which will produce dividends of more personnel and capital gains in better mental health facilities and services.

Many commercial health insurance companies already provide full coverage for mental illnesses equal to that for all other illnesses without exclusions or exceptions. In more than a few states the Blue Cross and Blue Shield programs also give equal or liberal coverage for mental illness in private psychiatric as well as in general hospitals. Unfortunately this is not true of the Blue Cross programs in Georgia; but as other states have done, sufficient pressure must be brought to bear from various sources and by interested citizens until liberal if not equal coverage for mental illness has been made possible. Therefore, this problem of progress can be met in Georgia if individuals, industrial and professional groups as well as executives would see that coverage for mental illness is provided in all of their health insurance programs. More progress will be possible if more people can provide themselves with adequate private psychiatric care without relying on government services or facilities.

The Most Logical Approach

The comprehensive community mental health center is now recognized as the most logical approach to and method of providing adequate psychiatric diagnostic and therapeutic care. This will be the theme of the Second A.M.A. Congress on Mental Illness and Health which is to be held in Chicago, November 5-7, 1964. All physicians, particularly non-psychiatric physicians, are urged to attend. The general physician is still recognized as the first line of defense against mental illness. With sound orientation and understanding, many of his patients receive from him in his office or in local hospitals adequate treatment for complete recovery. Others will require specialized care which should also be available in the community.

In order for real progress to be obtained in the establishment of community mental health centers, the problem of finance is of utmost importance. Despite the fact that federal and state funds may well be available, these funds very likely will be provided to each community on some type of matching program yet to be determined. Therefore, it will be necessary for local funds to be available which should be derived from an impartial tax levy in order to include mental health services among county general health funds.

These are only a few of the many problems which lie in our road of progress toward better mental health services for those who are mentally ill or mentally retarded. However, with persistent effort these problems are being trimmed down to size and in due time more progress will be made. All physicians in Georgia are challenged to meet their obligations in this important field of public health.

Jas. N. Brawner, Jr., M.D.

Something New Has Been Done

Traditionally and historically the Association's annual meeting held in May has had three major purposes; that of postgraduate medical education, the conduct of the business of MAG and the promotion of fellowship among the members of the profession.

Major Changes

However, during the past few years there has been a notable decrease in attendance. To counter this trend, it was recommended that some major changes in the content and format of the meeting be instituted. The Annual Session Board has initiated these revisions and a new "streamlined" meeting will be conducted for and by the membership effective at the Augusta MAG Annual Session scheduled for May 2-4, 1965.

Foremost of the changes was the improvement of the scientific presentations. Some 14 specialty program chairmen are working together in setting up a series of joint section meetings for Sunday afternoon, May 2; Monday morning, May 3; and Tuesday morning, May 4. They have pledged that the speakers and subjects will be of real interest to all groups in the joint section meetings.

To Combine

Another change was the combining of the MAG Business Meetings with the sessions of the MAG House of Delegates. On Sunday afternoon, there will be a brief "solo" business meeting for the purpose of nominating new MAG Officers and Councilors — but the second and third business meetings will be convened with the Delegates' meetings. Monday morning, when the House of Delegates introduces all business before the House, the MAG official welcome will be slated, along with an address by the Association President-Elect.

Tuesday Adjournment

The second session of the House of Delegates has been changed from Wednesday morning to Tuesday afternoon, thereby cuting out the necessity of having any meetings at all on Wednesday. This means the Annual Session will adjourn late Tuesday afternoon — in short, lopping one day off the meeting.

EDITORIALS / Continued

At this second session Tuesday afternoon, immediately following the reports of the Delegate's Reference Committees, the Association will present the MAG awards, install new Officers and Councilors and select a site for the 1967 Annual Meeting. By having joint MAG Business Meetings with the House of Delegates, it is hoped the general membership will attend in addition to the Delegates, making a more respectably sized audience.

As the entire meeting adjourns on Tuesday afternoon, the MAG President's Banquet has been switched from Tuesday evening to Monday evening — and the ever popular Alumni Banquets have been changed from Monday night to Sunday night.

Specialty Society luncheons and dinners will be held Saturday afternoon and evening, Monday afternoon and Tuesday afternoon. All of Monday afternoon has been left "open" as far as official MAG functions so that Specialty Societies may convene their own business meetings and similar functions.

Streamlined

In summary, the format has been streamlined — the quality of scientific presentations improved, and the length of the entire meeting has been shortened by one day. All this to the end that physicians can and will attend their state medical association's annual session. Some two or three publicity pieces will be mailed to all MAG members prior to the annual meeting with hotel and motel reservation forms — and it is believed that the 1965 Augusta meeting will see a reversal in the downward attendance trend. If these new innovations are successful, it will be a "full house" in Augusta on May 2-4, 1965.

— 1965 AUGUSTA MAG ANNUAL SESSION PROGRAM —

SATURDAY, MAY 1	SUNDAY, MAY 2	MONDAY, MAY 3	TUESDAY, MAY 4
12:00 — SPECIALTY SOCIETY LUNCHEONS	— CHURCH —	9:00 - 10:30 — JOINT MAG BUSINESS SESSION AND HOUSE OF DELEGATES MEETING	9:00 - 12:00 noon — SCIENTIFIC SECTION MEETINGS (1) Ob-Gyn., Int. Medicine and G.P. (2) Pathology, Surgery, Urology and Radiology
	2:00 - 4:30 — SCIENTIFIC SECTION MEETINGS (1) Radiology, Chest and Public Health (2) Anesthesiology, Oto. and Ophth. and Surgery (3) Dermatology, Pathology, G.P. and Int. Medicine	10:30 - 1:00 — SCIENTIFIC SECTION MEETINGS (1) Pediatrics, Ob-Gyn. and Diabetes (2) Psychiatry, G.P. and Orthopedics	
		1:00 - 2:30 — SPECIALTY SOCIETY LUNCHEONS	12:00 noon - 1:00 — CALHOUN LECTURESHIP
	4:30 - 5:30 — MAG GENERAL BUSINESS SESSION	2:30— OPEN AFTERNOON FOR SPECIALTY SOCIETY MEETINGS	1:00 - 2:30 — SPECIALTY SOCIETY LUNCHEONS
5:00 — SPECIALTY SOCIETY DINNERS	5:30 - 6:30 — DELEGATES AND EXHIBITORS SOCIAL HOUR	2:30 — HOUSE REFERENCE COMMITTEES	
		6:30 - 8:00 — RICHMOND COUNTY SOCIAL HOUR	2:30 — JOINT MAG BUSINESS SESSION AND HOUSE OF DELEGATES MEETING
	6:30 — ALUMNI BANQUETS	8:00— MAG PRESIDENT'S BANQUET	

1965 Annual Session

May 2-4, 1965—Augusta, Georgia

First Call for Scientific Papers

All titles must be submitted to the respective program chairmen listed below before November 1, 1964

ANESTHESIOLOGY
Zachariah W. Gramling, M.D.
Talmadge Memorial Hospital
Augusta

CHEST
David P. Hall, M.D.
Medical College of Georgia
Augusta

DERMATOLOGY
C. Conrad Smith, M.D.
1349 Druid Park Avenue
Augusta

DIABETES
Alex T. Murphy, M.D.
1134 Druid Park Avenue
Augusta

GENERAL PRACTICE
William A. Fuller, M.D.
1403 Gwinnett Street
Augusta

MEDICINE
Harry T. Harper, Jr., M.D.
1467 Harper Street
Augusta

OBSTETRICS AND GYNECOLOGY
C. I. Bryans, Jr., M.D.
Talmadge Memorial Hospital
Augusta

OPHTHLMOLOGY and OTOLARYNGOLOGY
John R. Fair, M.D.
Medical College of Georgia
Augusta

ORTHOPEDICS
Charles Freeman, M.D.
1136 Druid Park Avenue
Augusta

PATHOLOGY
Menard Ihnen, M.D.
Laboratory, University Hospital
Augusta

PEDIATRICS
A. Joe Green, M.D.
1727 Central Avenue
Augusta

PSYCHIATRY
Julius T. Johnson, M.D.
1445 Harper Street
Augusta

PUBLIC HEALTH
Abe J. Davis, M.D.
3039 Pine Needle Road
Augusta

RADIOLOGY
Stephen W. Brown, M.D.
2922 Bransford Road
Augusta

SURGERY
Harry D. Pinson, M.D.
1467 Harper Street
Augusta

UROLOGY
J. Robert Rinker, M.D.
Medical College of Georgia
Augusta

PRESIDENT'S LETTER

"LIKE A HORSE AND CARRIAGE"

No man can learn when he has not had preparation for learning, however near his eyes are to the subject. A physicist may reveal to an electrician the results of his latest research, a priceless secret; and the electrician will never be the wiser. A pure research man in medical school can spend years peering into a microscope and growing organisms on the petri dish and experimenting with animals. He may finally come up with some fabulous solution to a baffling disease. Unless the practicing physician is prepared for learning, he will never understand it, however near his eyes are to the subject.

A Valuable Contribution

An electrician may have learned from experience that connecting wires by twisting them together longitudinally gives a better connection than connecting them with a loop. The physicist might not have known about it at first. But when the electrician told him about it, he experimented, it worked, and because he had the preparation for learning, he understood why and explained it. It was near the physicist's eyes all the time. The electrician made a valuable contribution.

It was not our research men or doctors' discovery of cinchona bark tea that answered the prayers of those poor souls racked with chills and fever for generations. Nor do we deserve credit for discovering that seaweed was helpful for those afflicted with toxic goiter. A doctor did make the observation that fresh limes prevented scurvy aboard ship. Researchers later explained all these things.

Without Each Other

This brings me to my subject, the actively practicing physician and the medical schools. It reminds me of a musical comedy that I saw many years ago in which there was a song that, as I remember, went something like this—"Love and marriage, horse and carriage, you can't get along without each other." It has seemed to me that at times over the past decade or so we have had love without marriage and the horse has sometimes run away from the carriage. Of course, the only people that suffer are the innocent children or passengers.

To magnify the print of the Hippocratic oath and to re-enforce the ties that bind us one to another — medical school faculty and graduate — I called a meeting this past month to re-acquaint one another with our respective problems. We have many — each in his own field. This meeting was composed of the hierarchy of each medical school in the state and a few actively practicing physicians. We gathered to lay plans for a larger meeting to take place some afternoon or evening. I had drawn up some six or eight topics that we might discuss. Much to my amazement, I never got beyond the first topic which was a discussion of ways and means of how the practicing physician may better understand the problems facing medical school educators — and by the same token, how to better acquaint medical educators with problems facing physicians in active practice. This would automatically include discussion of better communications for closer liaison between faculty of medical schools and practicing physicians. When I finished with this topic, the faculty of both schools stopped me and said (in the same tone of voice as they did years ago) that unless we devoted an entire weekend to this particular topic — Friday night, all day Saturday and Sunday morning — that they had just rather stay home and smoke their pipes or doodle or talk about Greece. This was all very pleasing to me, and it should be to every physician in Georgia.

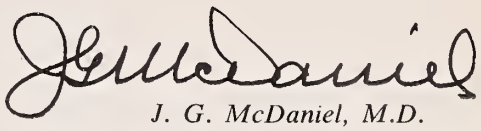
It impressed me that the faculty of our medical schools are every bit as interested in the sick people of Georgia as the actively practicing physician and just as interested in turning out good doctors. We just do not have the opportunity to sit down and talk to each other. We unanimously agreed to set up a meeting at Callaway Gardens in January of 1965, for an entire weekend to talk about our

mutual problem. Participants will include ten faculty members from each school and 20 actively practicing physicians.

The Forerunner

It is my fervent hope that this will be the forerunner of many meetings to come. Let it always be said of a doctor graduating from our medical schools in Georgia that he can learn because he has the preparation to learn, particularly those subjects that are near his eyes. And let it be said of our teachers, that if one of his graduates makes an accurate and worthwhile observation, the teacher will check it and explain it if he can, using all the facilities that only the medical school has at its command. If the teacher can come up with a solution, I believe our graduates will understand it.

Let us remember that as in love and marriage, and the horse and carriage, we can't get along without each other.



J. G. McDaniel, M.D.
President, Medical Associaion of Georgia

"THE BUSINESS SIDE OF MEDICAL PRACTICE" BOOKLET NOW AVAILABLE TO GEORGIA DOCTORS

The American Medical Association and the Sears-Roebuck Foundation have again collaborated to bring to the nation's doctors a practical booklet on a non-medical phase of the physician's practice. Entitled *The Business Side of Medical Practice,* the 57-page booklet is available free of charge to any Georgia doctor. Last year the AMA and the Sears Foundation together compiled a medical practice units 'planning guide' for the physician. Its success has prompted the same team to broach another facet of the doctor's life — business.

In Practice

The new booklet is visually very similar to the first one. It is done on heavy vellum stock with color charts, graphs, and line illustrations and caricatures depicting the "practical problems" the physician may encounter in his practice. The contents run the gamut from "Selecting the Place to Practice," and "What Insurance Should A Doctor Carry?" to "Human and Community Relations." The size of the booklet, 12" x 9", is made for easy handling, and facilitates quick reference and lucid viewing for the 15 minutes of reading time a physician may steal from his busy office day. The booklet will be a welcome, attractive addition to any doctor's office library — a pleasant, practical compilation of facts for those who would like to know more about the business side of medical practice.

The booklet may be obtained by writing to the *Medical Association of Georgia, 938 Peachtree St., N.E., Atlanta, Ga. 30309.* Still available are the booklets on the "Medical Practice Units 'Planning Guide,'" which may also be obtained, free of charge, by writing to the above address. (See page 308 of this issue for more information on the 'Planning Guide').

MEDICAL ASSOCIATION LISTS TEN MEMBERS ON STATE BOARD OF HEALTH

Ten members of the Medical Association of Georgia have been appointed to the newly reconstituted Georgia State Board of Health. All appointments were made by Governor Carl Sanders from nominations submitted by MAG. The complete new Board, in addition to the member physicians, is listed below.

PHYSICIANS

Name	*County*
Dr. Julian K. Quattlebaum, Sr.	Chatham
1st District	
Dr. A. G. Funderburk	Colquitt
2nd District	
Dr. Roy L. Gibson, Jr.	Muscogee
3rd District	
Dr. Richard H. Smoot	DeKalb
4th District	
Dr. Fred L. Allman	Fulton
5th District	
Dr. B. W. Forester	Bibb
6th District	
Dr. Fred H. Simonton	Haralson
7th District	
Dr. Alex G. Little	Lowndes
8th District	
Dr. P. K. Dixon	Hall
9th District	
Dr. John M. Martin	Richmond
10th District	

DENTISTS

Dr. Joe M. Hawley	Muscogee
Dr. Wesley A. Carr	Richmond

PHARMACISTS

Dr. John D. Marshall	Mitchell
Honorable S. Lanier Hardman	Newton

VETERINARIAN

Dr. J. T. Mercer	Elbert

ASSOCIATION OF COUNTY COMMISSIONERS

Honorable Erin W. Johnson	Ware

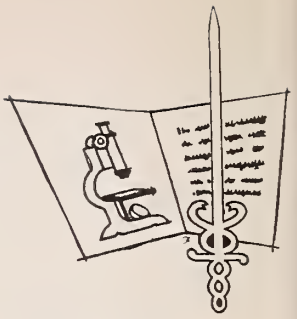
GEORGIA MUNICIPAL ASSOCIATION

Honorable Carl E. Pruett	Spalding

STATE AT LARGE

Honorable J. Frank Myers	Emanuel

CANCER PAGE



CANCER OF THE PANCREAS

William H. Moretz, M.D., *Augusta*

While the death rates for cancer of the digestive organs as a whole from 1948 to 1960 have decreased, the death rate for cancer of the pancreas has increased.

In 1935, Whipple[1] reported successfully removing a carcinoma of the ampulla of Vater in two stages and in 1941, Trimble, et al[2] reported the first one-stage operation for cancer of the head of the pancreas and the ampulla of Vater.

The one-stage pancreatoduodenectomy, now commonly known as the Whipple operation, has proven to be a feasible procedure in the hands of many well-trained surgeons. While it is accepted as the treatment of choice for cancer of the ampulla of Vater, there are many who doubt that it is indicated for cancer of the head of the pancreas. They reach this conclusion because of the considerable operative risk and the scarcity of reported five-year cures, only 26 five-year cures being found in the English literature in 1963.

There is a high operative mortality for any operation performed on patients with cancer of the head of the pancreas. Laparotomy alone with or without a shunting procedure is a serious undertaking in a debilitated and deeply jaundiced patient. The chance of surviving operation is less when pancreatoduodenectomy is added to a shunting procedure, but the added risk is minimized when the surgeon is experienced in this procedure. The present 20 to 30 per cent mortality associated with the one-stage procedure is much lower than the earlier experiences, and further reduction is expected.

The one-stage pancreatoduodenectomy is a logical, cancer-type operation which should be utilized for those patients who have an operable malignant lesion in the region of the head of the pancreas. There are two good reasons for this philosophy.

One has to do with the difficulties in determining the true nature of a lesion in the area of the head of the pancreas. It is often difficult and sometimes impossible at surgery even with the aid of frozen sections to differentiate a carcinoma of the head of the pancreas from one of the ampulla of Vater, from a carcinoid, from a common duct cancer, or from an islet cell cancer of the pancreas. The chance of cure in most of these other lesions is much greater (i.e. about 30 per cent for cancer of ampulla of Vater) than for cancer of the pancreas. A defeatist attitude toward cancer of the pancreas would undoubtedly deny many patients with less ominous conditions the chance of cure offered only by radical resection of the pancreatoduodenal area.

The second reason for favoring radical resection for malignant lesions in the area of the head of the pancreas is the palliation achieved. Rhoads, in relation to cancers of the pancreatoduodenal area, reported[3] the average survival time after Whipple resections of 30.5 months as compared to 11.0 months after shunting only and 2.5 months after laparotomy alone. Williams, in relation to just cancer of the pancreas, reported[4] an average survival time of 18 months after radical resection as compared to five months after shunting procedures. While other factors such as the more advanced state of disease in the latter groups play a part, the increased survival time is significant. Of perhaps greater importance as a virtue of the Whipple operation, other than the increase in survival time, is the relief of pain. Pain, often severe preoperatively, is usually relieved by resection of the tumor. Most patients die in relative comfort of metastases. It is reasonable to assume also that many of those without pain at the time of operation would have developed pain had the tumor not been resected. Jaundice and the accompanying pruritis are usually relieved as well by shunting alone as by resection.

Because of the difficulty in differentiating between various lesions, some of which are curable, in the pancreatoduodenal area, and because of the palliation offered in those which are not curable, the one-stage pancreatoduodenectomy should be performed for operable lesions in that area.

Medical College of Georgia

References

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Approved by the Professional Education Committee, Georgia Division, ACS.

IDIOPATHIC HYPERTROPHIC SUB-AORTIC STENOSIS

F. Dempsey Guillebeau, *Albany*

IDIOPATHIC HYPERTROPHIC sub-aortic stenosis is one of the cardio-myopathies of undertermined etiology. The ventricular hypertrophy present is generalized but the interventricular septum is usually disproportionately thickened. The obstruction to left ventricular outflow results from systolic narrowing of the hypertrophied left ventricular outflow tract. The obstruction is not uniform throughout all of ventricular ejection but becomes manifest during mid-systole when the contracting hypertrophied mycardium significantly narrows the outflow tract. The degree of obstruction is dependent upon the force of ventricular contraction, and it has been observed that drugs such as digitalis and isopropylarterenol increase the severity of the obstruction by augmenting the force of contraction and diminishing end-systolic residual volume. Conversely, drugs such as methoxamine which increase end-systolic ventricular volume reduce or eliminate the obstruction to outflow. There is frequently a spontaneous fluctuation in the degree of stenosis.

Symptoms and Physical Findings

The symptoms are not specific; dyspnea, palpitations, fatigability, angina, syncope, congestive failure and sudden death have all been noted.

The presence of this type of aortic stenosis should be suspected, however, from the physical findings. It is most often confused with ventricular septal defect or mitral insufficiency. If the obstruction is clinically significant, left ventricular hypertrophy will develop and a prominent apical thrust and ventricular lift should be easily felt. Often a systolic thrill is felt extending from the apex to the left lower sternal border. The thrill is practically never felt in the primary aortic area or in the neck. In contrast to valvular aortic stenosis the upstroke of the arterial pulse is normal or brisk and not prolonged. A prominent atrial sound is palpable or audible due to increased resistance of left ventricular filling. A long, loud, harsh ejection systolic murmur is heard over the precordium of maximal intensity at the apex or along the left lower sternal border. It is usually not loud at the primary aortic area or in the neck. The murmur of aortic insufficiency has not been heard in patients with hypertrophic subaortic stenosis and its presence would rule strongly against this diagnosis. As in other patients with obstruction to left ventricular outflow, there may be paradoxical splitting of the second heart sound. An indirect carotid pulse tracing does not show the prolonged upstroke with the anacrotic shoulder and vibrations characteristic of aortic stenosis but rather a sharp upstroke with mid-systolic cut-off followed by a second smaller deflection. X-rays reveal evidence of concentric left ventricular hypertrophy and the left atrium is frequently enlarged. The absence of aortic valve calcification and minimal or no post-stenotic dilatation of the aorta are helpful findings in differentiating the disease from valvular aortic stenosis. The electrocardiogram shows left ventricular hypertrophy or frequently anomalous atrioventricular excitation. The definitive diagnostic procedures, cardiac catheterization and angiocardiography, reveal a systolic pressure gradient within the left ventricular outflow tract, and a markedly thickened ventricular wall obstructing the outflow tract during a portion of the cardiac cycle.

Specific therapy consists of surgical resection of portions of the hypertrophied myocardium but this should only be done in those patients who are progressively symptomatic and in whom a large intraventricular pressure gradient can be demonstrated.

910 North Jefferson

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

LEGAL PAGE

RELIGION AND BLOOD TRANSFUSIONS

John L. Moore, Jr., *Atlanta*

A February, 1964, decision of the United States Court of Appeals for the District of Columbia Circuit recalls an article appearing in the January, 1961, issue of the Journal.

Once again, a patient at a hospital refused to have medically necessary blood transfusions because she was a Jehovah's Witness.

The hospital and the attending physician, apparently in desperation because neither the patient nor her husband would consent to the blood transfusions, applied for an order allowing the hospital and physician to transfuse the patient. The United States District Court refused the order.

At 4:00 o'clock p.m. last September 17, the attorneys for the hospital appeared in the chambers of one of the judges of the United States Court of Appeals. The judge heard their urgent application and, though there was no attorney representing the patient, proceeded immediately to the hospital where he saw the patient and interviewed the nurses and attending physicians.

The Judge of the United States Circuit Court of Appeals then, by his single action, signed an order allowing the hospital to transfuse the patient.

The patient recovered. She then filed an appeal from the lower court's order. She said that the court, in entering its order, had denied her of her rights of freedom of religion under the First Amendment to the United States Constitution.

A majority of all of the Judges of the United States Court of Appeals for the District of Columbia Circuit joined in denying the appeal. Separate opinions were filed by three judges. One agreed with the majority but said that there was no issue left to pass on as the transfusion had already been accomplished and the patient's life saved.

Two of the judges disagreed with the action of the majority. One of the judges emphasized the procedural defect in an appellate judge's acting alone, rather than with two others on the Bench.

A recent newspaper article tells of a New Jersey Supreme Court decision requiring a woman to have a blood transfusion despite her religious convictions. She was seven and one-half months pregnant and her medical condition was such that she, and, most likely, the unborn child would die if she did not have a blood transfusion. The Court said it had no difficulty in arriving at the decision to require the pregnant woman to have a transfusion to save the life of the unborn child. The New Jersey Supreme Court said, however, that the more difficult question is whether an adult may be compelled to submit to such medical procedures when necessary to save his life.

As recognized by the New Jersey Court, the District of Columbia case raises the extremely interesting issue of whether a person, for reasons of religious principle, has the right to die rather than to receive medically necessary treatment. Of course, all religious denominations have some scruples against the performance of some medical procedures. Most of these are recognized by the medical profession which abides by them. But in this case, the judge who signed the order said:

> "If self-homicide is a crime, there is no exception to the law's command for those who believe the crime to be divinely ordained."

Perhaps the judge should also have said "in this case . . ." but such words can be read into his statement.

Self-homicide — to save one's child — in proper circumstances would be applauded by all of us.

The District of Columbia case stands for the proposition that one may not allow oneself to die by refusing to accept normally performed medical procedures for the religious principles of a small minority. It can be argued that the Nazis used that thought to sterilize, breed, and exterminate human beings. Yet, this writer cannot but agree with the judge who signed the order for the blood transfusion.*

A month after the New Jersey Supreme Court decision, the United States Supreme Court upheld its ruling. Shortly afterwards, a three and one-half pound boy was born to the plaintiff in the New Jersey case. The baby was delivered by Caesarian section one month prematurely. The mother was given a pint of blood during the delivery. Both mother and son were reported in good condition in June 26, 1964, newspaper articles.

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* *The case commented on is Application of the President and Directors of Georgetown College, Inc., A Body Corporate, Misc. No. 2180 (D.C. Cir. Feb. 3, 1964).*

Prepared at the request of The Medical Association of Georgia. Mr. Moore is a member of the firm of Alston, Miller & Gaines, General Counsel to The Medical Association of Georgia.

ABSTRACTS BY GEORGIA AUTHORS

Yeh, Thomas J., M.D.; Edwin L. Brackney, M.D.; David P. Hall, M.D.; and Robert G. Ellison, M.D., Medical College of Georgia, Augusta, Georgia, "Renal Complications of Open Heart Surgery: Predisposing Factors, Prevention and Management," J. Thoracic & Cardiovasc. Surg. 47:79-97 (Jan) 64.

The incidence of complications was correlated with various factors in the conduct of extracorporeal circulation for open-heart surgery. Statistical analysis indicates that low flow rate (particularly in combination with hypothermia), excessive hemolysis, long perfusion, low postoperative pH, and the use of Endrate preserved blood for priming the pump all predisposed to renal damage. In cases in which flow rate was above 2.2 L./M.$_2$/min., perfusion shorter than 30 minutes, or hemolysis of less than 50 mg. per cent renal complications were virtually nonexistent, regardless of all other factors. It is suggested that renal complication may be completely preventable by the use of high flow rates when long perfusion is anticipated and excessive hemolysis appears unavoidable. Although probably not necessary in routine cases, mannitol may prove to be a valuable prophylactic agent against renal damage as a result of perfusion.

Seventeen patients with renal failure and tubular acidosis were treated with conservative means. Among these, only one patient required dialysis, and ultimately survived. There was only one death due to renal causes.

Achord, James L., M.D. and John T. Galambos, M.D., Emory University Clinic, P. O. Box 459, Atlanta 22, Georgia, "The Metabolism of Injected Na_2 $S^{35}O_4$," Metab. 13:31-36 (Jan) 64.

The effect of cortisol upon the metabolic patterns of $S^{35}O_4$ associated with PAS serum proteins has been studied in three groups of rats: (1) with normal livers; (2) with cirrhosis; and (3) with hepatomas induced by 3'-methyl-4-dimethylaminoazobenzene and an eight per cent protein diet. There were no appreciable differences observed in the degree or rate of incorporation nor in the decay slopes of cortisol-treated and untreated animals. Separation of serum albumin and alpha globulins of paper electrophoresis in normal rats also failed to demonstrate any effect of cortisol pretreatment on the association of $S^{35}O_4$ with these serum protein fractions.

Smith, Robert R., M.D.; Edgar L. Frazell, M.D.; Ralph Caulk, M.D.; Paul H. Holinger, M.D.; and William O. Russell, M.D., Emory Hospital, Atlanta 22, Georgia, 'The American Joint Committee's Proposed Method of Stage Classification and End-Result Reporting Applied to 1,320 Pharynx Cancers," Cancer 16:1505-1520 (Dec) 63

A universally accepted method of stage classification and end results reporting of cancer is necessary for meaningful analysis of cancer control information. An American Joint Committee, made up of representatives of the American College of Surgeons, Radiologists, Physicians, and Pathologists, the American Cancer Society and the National Cancer Institute have undertaken the task of formulating and field testing methods of stage classification of cancer of specific sites. This study reports the findings of the field trial for carcinoma of the pharynx.

The pharynx is classified into its three regions, i.e., nasopharynx, oropharynx and hypopharynx. Each region is subdivided into specific sites. At the present time it is recommended that pharynx cancer be reported separately for each site of each region. The classification method defines the four stages of disease on the basis of anatomic extent of cancer present at the primary site (I), the regional node involvement (N), and distant metastasis (M). The method is similar to that already reported for carcinoma of the larynx.

When the staging was applied to 1320 pharynx cancers collected from 18 cooperating centers in the United States, the method was found workable and gave gradation of survival values for each stage for each site. Most groups of stage I cancers had a 65-75 per cent five-year survival, Stage II, 30-40 per cent, Stage III, 20-30 per cent, and Stage IV, 0-20 per cent. Variations in survival were observed with the type of therapy used.

McInnes, George F., M.D., and Harold S. Engler, M.D., Medical College of Georgia, Augusta, Georgia, "Experiences with the Use of an Ileal Loop in Reconstruction of the Bladder and Ureter Following Radical Pelvic Surgery," Cancer 16:1570-1577 (Dec) 63.

Adequate resection of pelvic cancer, especially in radiation failures, may require sacrifice of the bladder and lower ureters as in total pelvic exenteration. In a few instances, it is possible to obtain an adequate margin with the removal of only a portion of the bladder and the uretero-vesicle junction on one or both sides. Reconstruction by means of an ileal loop is described.

Experiences of any one surgeon in the reconstruction of these organs is necessarily limited to a small selected group of cases.

A follow-up of reconstruction ileal loop surgery is presented with some cases having reached the five-year mark. These patients are alive, and in most instances free of disease, with satisfactory urinary tract function and without the disadvantages of an external urinary receptacle.

Rieser, Charles, M.D., and William L. McDougall, Jr., M.D., Box 459, Emory University, Atlanta 22, Georgia, "The Urological Complications of Abdomino-Perineal Resection," Am. Surgeon 29:826-829 (Nov) 63.

This study analyzed the urologic complications of 176 patients who underwent abdomino-perineal resection at Grady Memorial and Emory University Hospitals from January, 1952, to December, 1961. Despite the advances of medicine and surgery, there has been no reduction in the incidence of complications. Urosepsis was the most frequent, occurring in 49.4 per cent during the first two months postoperative, and in 35 per cent longer than two months. Usually the bladder was the site of infection and seemed associated with its emptying ability. The cause of bladder dysfunction is not always evident but is variously postulated to be mechanical, neurogenic, infectious, obstructive or combinations of several of these factors. The general metabolic and nutritional status of the patient also seemed influential.

Recommendations aimed at the prevention of urosepsis suggest a thorough preoperative urologic assessment of local obstructive factors, neurologic integrity, and anatomic conformation of the lower urinary tract. Excretory urography may reveal unsuspected complications of the kidneys or ureters. Measures are suggested for coping with the postoperative urinary complications both in the immediate and late periods.

Cohen, Sheldon B., M.D., 384 Peachtree Street, N.E., Atlanta 8, Georgia, "Brain Damage Due to Penicillin," JAMA 186:899-902 (Dec 7) 63.

Two young adults suffered anaphylactic shock after administration of penicillin. One patient received an intramuscular injection while the other ingested a tablet. Upon recovery from shock, signs and symptoms of acute brain syndrome, including disorientation and confusion, were present. This was followed by persistent chronic brain syndrome. Nine months after the episode of shock, one patient showed moderate intellectual impairment with constriction of interests and confabulation. The other patient, 15 months following anaphylactic shock, was severely impaired, with disorientation, very poor memory, and inability to adequately care for home or child. Other psychiatric disturbances due to penicillin do not generally have such serious sequelae. Penicillin today constitutes the most common cause of anaphylactic shock and it has been estimated that upwards of 1,000 people have been killed in the United States by this mechanism. Since there is approximately a 90 per cent survival rate from anaphylactic shock, it seems probable that many other patients who recover from the acute phases of shock suffer some degree of brain damage, acute and/or chronic.

Moran, Neil C., M.D., Deoartment of Pharmacology, Emory University, Atlanta 22, Georgia, "Adrenergic Receptors Within the Cardiovascular System," Circulation 28:987-993 (Nov) 63.

Receptors are loci of effector cells which react with specific chemical compounds (Neurohumoral transmitters or sympathomimetic drugs) to trigger sequential reactions leading to cellular responses (e.g., augmented myocardial contraction, vasoconstriction, glycogenolysis, etc.). Adrenegic

receptors are classified as *alpha* and *beta* on the basis of 1) differential orders of potency of a series of sympathomimetic agents on several systems and 2) selective, differential blockade. Thus, adrenergically-induced vasoconstriction is subserved by *alpha* receptors [methoxamine (M) strong, isoproterenol (I) weak; blockade by phenoxybenzamine (PBZ) but not by dichloroisoproterenol (DCI)], vasodilatation and cardiac stimulation by *beta* receptors (I strong, M weak; blockade by DCI but not by PBZ). Rational use of sympathomimetic drugs can be based upon understanding their actions according to the dual receptor concept. Therapeutic use of *beta* adrenergic blocking drugs, such as nethalide, is considered.

Stone, H. Harlan, M.D. and G. Skid Callahan, M.D., 69 Butler Street, S.E., Atlanta, Georgia, "Soft Tissue Injuries of the Neck," Surgery, Cynec. & Obst. 117:745-752 (Dec) 63.

A study was made of 241 patients who required hospital admission for treatment of one or more cervical wounds.

Urgent surgical intervention was indicated by trauma to major vessels, the upper respiratory tract, and the esophagus. Other organ injuries frequently necessitated operation, although seldom as an emergency procedure.

The overall mortality rate was ten per cent. Massive hemorrhage, pulmonary complications, and associated injuries were responsible for the majority of deaths.

Arrest of hemorrhage, arterial reanastomosis, maintenance of a patent airway, and diagnosis of the perforated esophagus were the more troublesome problems. Rational management demanded recognition of a major organ injury at the time of initial evaluation, followed by immediate exploration. Significant external or masked internal hemorrhage indicated a major vascular injury, while respiratory distress and subcutaneous emphysema were usually associated with upper respiratory trauma. The esophagram was reliable only if positive. Often associated injuries, especially if involving the chest, brain, or spinal cord, were the crucial factors that determined survival.

Total care required both intelligent and energetic management.

Talledo, Eduardo, M.D. and F. P. Zuspan, M.D., Medical College of Georgia, Augusta, Georgia, "When Is the Fetus Dead?", JAMA 196:926-928 (Dec 7) 63.

The observations of this study pertain to four pregnant patients in whom a clinical diagnosis of fetal demise in utero was made. By fetal elecrocardiography, residual electrical activity of the fetal heart at high and variable rates was recorded (260—700 cycles per minute). All mothers were delivered of macerated stillborns: Two at term and two prematurely. All patients with clinical death in utero have not yielded a positive electrocardiogram. Three important points are discussed: A—the possibility that the tracings obtained may be artifacs. B—the reason why some dead fetuses in utero maintain residual electrical activity in their hearts and others do not. C—the probable abnormality of the rhythm found in the electrocardiogram.

Since the findings here reported are not pathognomonic of death in utero, attention is called to those using fetal electrocardiography as a diagnostic tool for a possible error in data interpretation.

Letton, A. H., M.D. and John Page Wilson, M.D., 340 Boulevard N.E., Atlanta 12, Georgia, "Surgical Management of Carcinoma of the Thyroid," South. M.J. 56:1388-1390 (Dec) 63.

In practice we classify our cases of carcinoma of the thyroid by placing them in one of two large categories, papillary and nonpapillary, as a means of determining, in general, the treatment. The non-papillary type of carcinoma usually metastasizes by way of the vascular system, and radical lymphatic resections are not effective, but thorough destruction of all thyroid tissue is required, so that all foci of malignancy are removed, and in order that effective I^{131} therapy can be used subsequently. The papillary type of carcinoma usually metastasizes by way of the lymphatics. There are clinically two types of papillary carcinoma of the thyroid, one which causes the death of the host and is lethal in its metastatic phenomena, and the other which does not cause death. Frequently there is no good way to distinguish between these types preoperatively. Recognition at operation may be a guide to therapy. When no involved nodes are found, one may assume the tumor has not metastasized, and local excision will at that time, although the patient should be watched for a number of years. When metastases are found one must assume that the tumor has the potential to cause death, and a radical resection should be done. The importance of a thorough radical resection, including superior mediastinal dissection, is stressed. Eighty-four per cent of the radical resections which were carried out had metastatic disease in the superior mediastinum. Both the surgeon and the patient should be prepared for splitting the sternum and doing the mediastinal dissection at the time of the original surgery if metastatic carcinoma is encountered in the perithyroid nodes.

Crutcher, James C., M.D., Medical Service, V.A. Hospital, 4158 Peachtree Road, N.E., Atlanta 19, Georgia, "Clinical Manifestations and Therapy of Acute Lead Intoxication Due to the Ingestion of Illicitly Distilled Alcohol," Ann. Int. Med. 59:707-715 (Nov) 63.

Thirty-two episodes of lead poisoning observed in 27 patients from the ingestion of bootleg whiskey made in lead-containing pipes and automobile radiators is reported. Seven had lead encephalopathy manifested by delirium, drowsiness, convulsions, and coma associated with increased cerebral spinal fluid protein. Basophilic stippling in both peripheral blood and bone marrow, a hypochromic anemia, increased reticulocytes, and an occasional positive direct Coombs' test were the major hematologic abnormalities. The gastrointestinal symptoms consisted of anorexia, nausea, vomiting, severe abdominal pain, and severe constipation, mimicking obstruction of the large bowel. These symptoms were of sufficient magnitude to cause surgical intervention in three patients in whom the diagnosis was not recognized. Initial albuminuria in six, of whom five had moderate azotema, clearing during treatment. Indirect bilirubinemia greater than one milligram per cent was seen in seven. Treatment with Ca EDTA, either two grams a day for five days, or one gram a day for ten days resulted in the alleviation of the abnormal signs and symptoms in all of the patients. 24-hour urine lead excretion ranged in individual patients from 20 milligrams to 1.5 milligrams per 24-hour urine volume (normal 0.20 mgm/liter). No toxic effects of Ca EDTA therapy were noted in these patients.

Molnar, Edmund, M.D.; Stephen W. Gray, Ph.D.; Ellsworth F. Cale, M.D.; and John E. Skandalakis, M.D., 1968 Peachtree Road, N.E., Atlanta 8, Georgia, "Meconium Ileus with Volvulus and Meconium Peritonitis," Am. Surgeon. 29:900-904 (Dec) 63.

Meconium ileus is only one manifestation of fibrocystic disease, a generalized disease of the exocrine glands of the body. It occurs in about 1/1100 births. Of the many serious complications of this disease, probably the most serious is an associated volvulus with perforation and meconium peritonitis. Over 100 cases of this complication have been reported in the literature with few survivors.

The pathophysiology and typical history and physical findings, with illustrations, are presented along with a discussion of the current concepts of surgical management. A detailed case report of this condition is included.

Greenblatt, Robert B., M.D.; Herman Domiques, M.D.; Virendra Mahesh, Ph.D.; and Robert Demos, M.D., Medical College of Georgia, Augusta, Georgia, "Gonadal Dysgenesis Intersex with XO/XY Mosaicism," JAMA 188:221-224 (April 20) 64.

Individuals with gonadal dysgenesis (Turner's syndrome) have been considered as demi-females because of the presence of only 45 chromosomes with a single X sex chromosome. Male pseudohermaphrodites usually have 46 chromosomes with an XY sex chromosome pattern. The missing sex chromosome in Turner's syndrome may be either an X or a Y. The finding of phenotypic females with an XO/XY chromosomal sex pattern having a gonadal dyagenesis and a contralateral testis provides a link between gonadal dyagenesis and male pseudohermaphroditism. In many instances Turner's syndrome, particularly those with androgenic manifestations, may well be atypical cases of male pseudohermaphroditism.

Pruce, Arthur M., M.D., 15 16th Street, N.E., Atlanta 9, Georgia, "Whiplash Injury: What's New?", South. M.J. 57: 57:332-337 (Mar) 64.

Evidence is reviewed of cerebral dysfunction, ocular impairment and traumatic disease of the cervical and dorsal lumbar spine. An attempt is made to move whiplash pathology out of the area of speculative diagnosis by presenting recent clinical and radiological methodology. The value of the electroencephalogram is demonstrated and the rarely discussed ocular and otological symptomatology is reviewed. So-called conservative treatment is exposed to critical analysis.

DEATHS

W. F. MASSEY, 82-year-old Chester physician, died unexpectedly at his home July 15, 1964.

Dr. Massey, born in Honoraville, Alabama, had practiced medicine in Chester for 54 years. He was graduated from the Atlanta College of Physicians and Surgeons, Atlanta, later Emory University, and did post graduate work at Johns Hopkins Hospital, Baltimore. He was one of the last of the general practitioners and began his service with a horse and buggy. He treated patients in Dodge, Bleckley and Laurens counties. For 34 years he had been a member of the Dodge County Board of Welfare and was a deacon of the Baptist Church. Dr. Massey was prominent in cultural, religious and civic affairs as well as in medical circles.

Survivors are, besides his widow, one son, Murphy Massey, of McDonough; two daughters, Mrs. W. L. Moore, of Metter, and Miss Olive Massey, of Athens, and three grandchildren.

PAUL McDONALD, Bolton, a Fulton County physician for over 50 years, died July 23, 1964, in a private hospital. He was 87.

Dr. McDonald was a native of Palmetto and was graduated from the Atlanta Medical College in 1900. He began practice in Grayson and had practiced in Bolton since 1907.

He was a charter member of Collins Methodist Church and a member of the Shrine, Masons and Scottish Rite. He belonged to the Fulton County Medical Society, the Medical Association of Georgia and the American Medical Association.

Survivors are his wife, the former Mabel Morris; two daughters, Mrs. Francis Storza and Mrs. Matt Jorgensen, both of Atlanta; three sons, Dr. Harold P. McDonald and Morris I. McDonald, Atlanta, and James B. McDonald, Newport, Tennessee; a sister, Mrs. Miles Hughes, and a brother, Mack McDonald, both of Bolton.

WILLIAM H. GOOD, 55, of Toccoa, a founder and partner in the Toccoa Clinic, died June 30, 1964, at Emory University Hospital.

Born in Philadelphia, Dr. Good graduated from the University of Pennsylvania School of Medicine, and served his internship at Robert Packer Hospital, Sayre, Pennsylvania, and his residency at Wayne University School of Medicine, Detroit. He was certified by the American Board of Surgery and served on the staffs of hospitals in Toccoa, Clayton and Demorest. He was a Southern Railway surgeon and a member of Stephens County Medical Society, the Medical Association of Georgia, the Southern Medical Association, and the American Medical Association. He was a Contributing Editor to *Medical Economics*.

Survivors, in addition to his wife, Mrs. Ruth Collins Good, are three sons, William H. Good, III, John Christopher Good and David Collins Good; his mother, Mrs. Helen Munder Good, of Toccoa; brothers Charles N. Good, Linwood, N. J., and John C. Good of Chambersburg, Pennsylvania.

SOCIETIES

Dr. and Mrs. J. L. Gallemore were hosts to the PEACH BELT MEDICAL SOCIETY at their home June 17, 1964. The guests gathered in the garden by the pool and after swimming a picnic supper was served.

Enjoying the evening were Dr. and Mrs. W. G. Talbert, Jr., Dr. and Mrs. V. W. McEver, Jr., Dr. and Mrs. R. S. Spears, Dr. and Mrs. M. V. Anders, Dr. and Mrs. M. D. Wynne, Jr., Dr. and Mrs. C. Ray Ivey, Dr. and Mrs. F. M. Lindsey, Dr. and Mrs. C. L. Beard, Dr. and Mrs. Dan Callahan and Dr. and Mrs. Ray Fioranelli of Warner Robins; Dr. and Mrs. Dan Nathan, Dr. and Mrs. A. S. Marshall and Dr. and Mrs. E. F. Seay of Fort Valley; Dr. and Mrs. H. E. Weems, Dr. and Mrs. A. G. Hendrick and Dr. and Mrs. John Arnall of Perry.

Johnny Gallemore who recently received his medical degree at Emory University School of Medicine was also present. He is presently doing postgraduate work at Duke University.

The speaker for the August 3 meeting of the STEPHENS COUNTY MEDICAL SOCIETY was Dr. Louis Hackett, Medical Advisor of the Office of the Department of Civil Defense. Dr. Hackett gave an informative talk on Civil Defense preparedness.

PERSONALS

First District

TRAVIS R. NOBLES, a native of Lyons, has returned to that city for the practice of general medicine and surgery in association with MICHAEL H. WHITTLE.

Fourth District

T. A. SAPPINGTON, Thomaston, was recently in Gallup, New Mexico, to assist in setting up a general practice residency in a government hospital on an Indian Reservation at the request of the U.S. Public Health Service. Mrs. Sappington accompanied him on the trip, which also took them to San Francisco for the AMA convention.

Fifth District

JOHN T. ELLIS, Chairman of Emory University School of Medicine's pathology department, has been named by the White House to a committee to assess the quality of the operations of the National Institutes of Health.

Emory cardiac surgeon, OSLER ABBOTT, is one of five distinguished heart specialists presently lecturing behind the iron curtain, a trip sponsored by the Bureau of Cultural and Educational Exchange of the U.S. Department of State in joint effort with the American College of Cardiology.

Four members of the DeKalb County Medical Society attended the American Medical Association meeting held in San Francisco June 20 through 25.

As well as attending the general sessions, ROGER ROWELL attended the section meetings on Ophthalmology. GEORGE P. SESSIONS attended the section meetings on Anesthesiology, and JOHN T. LESLIE attended those on Pediatrics. ROBERT M. FINE attended the meetings of the Society for Investigative Dermatology as well as the section meetings on Dermatology.

A council of outstanding alumni has been chosen to advise Emory University's medical school, according to ARTHUR P. RICHARDSON, Dean.

The advisory council will work to increase communication between alumni and the rapidly growing school, Dean Richardson says. It will also discuss medical school problems with the administration, offering advice and counsel.

The new group will meet twice a year in one-day sessions, the first to be sometime this fall.

Serving on the council are: GEORGE H. ALEXANDER, Forsyth; THOMAS ANDERSON, JR., Atlanta; LINTON H. BISHOP, JR., Atlanta; EDMUND BRANNEN, Macon; J. W. CHAMBERS, LaGrange; ROBERT C. DAVIS, Atlanta; F. WILLIAM DOWDA, Atlanta; HARRISON L. ROGERS, JR., Atlanta; THOMAS L. ROSS, JR., Macon; CHARLES R. UNDERWOOD, Marietta; J. FRANK WALKER, Atlanta; WILLIAM C. WARREN, Atlanta.

W. F. BROWN, who has been a resident in plastic surgery at the Mayo Foundation in Rochester, Minnesota, has left that city and will be located in Atlanta.

C. E. CUNNINGHAM, Atlanta physician, had his dream vacation come true this summer when he visited 12 Presbyterian U.S. mission stations in the Congo. Previous plans for medical missionary work had been waylayed, and this was Dr. Cunningham's first opportunity to see his avocation first-hand.

Sixth District

R. W. OLIVER, JR., has moved to Macon where he will take a four-year residency in surgery at Macon General Hospital. Dr. Oliver and his family have lived in Lyons for the past five years where he has worked as a general practitioner.

Seventh District

Officials of Harbin Clinic, Rome, have announced that WILLIAM S. DAVIS has joined the clinic staff for practice in the field of psychiatry.

Ninth District

Medical associates of the Toccoa Clinic have announced the addition of DONALD A. CRIPPEN to their staff; he will practice surgery.

EDWARD E. ESTES, JR. is a new addition to Gainesville's medical staff. He will be associated with RAFE BANKS, JR. and JAY R. JOHNSON, Gainesville urologists.

Tenth District

The Sparta partnership of GEORGE F. GREEN and M. LYNN FERRELL has announced an extension of their practice to include a half day in Warrenton. The two physicians have taken over the office and equipment of WILBUR HARPER, who has moved to Augusta.

HARRY B. O'REAR, President of the Medical College of Georgia, Augusta, spoke at the commencement exercises of Georgia State College August 19, at the Atlanta municipal auditorium.

Washington newcomer, CHARLES E. POLLOCK, has entered the practice of medicine with his brother, JOHN E. POLLOCK, JR. and M. C. ADAIR and CHARLES WILLS.

JOSEPH D. LEE, Augusta, recently announced the new location of his office for the practice of general, thoracic and vascular surgery. His new address — 1021 Fifteenth St., Suite No. 6, Augusta.

NEW MEDICAL PRACTICE UNITS 'PLANNING GUIDE' OFFERED BY AMA, SEARS-ROEBUCK

The American Medical Association in conjunction with the Sears-Roebuck Foundation, has recently published a new planning guide for establishing medical practice units. Done on heavy vellum paper and consisting of 82 pages, the guide, of which there is only a limited supply, is available to any doctor. The guide contains suggestions on location, hospital and patient accessibility, size, property costs, shape and placement of building, climate, parking, landscaping, remodeling, and a number of other important ideas regarding a medical office. Floor plans for each room needed in an office are given in black and white scale drawings and several suggested plans for two and three man offices are shown. Examples of "do-it-yourself" possibilities for medical practice facilities are illustrated along with lists of equipment and their prices. Doctors interested in obtaining the new planning guide should write to the Medical Association of Georgia Headquarters Office, 938 Peachtree St., N.E., Atlanta, Georgia 30309.

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The Transparent Woman

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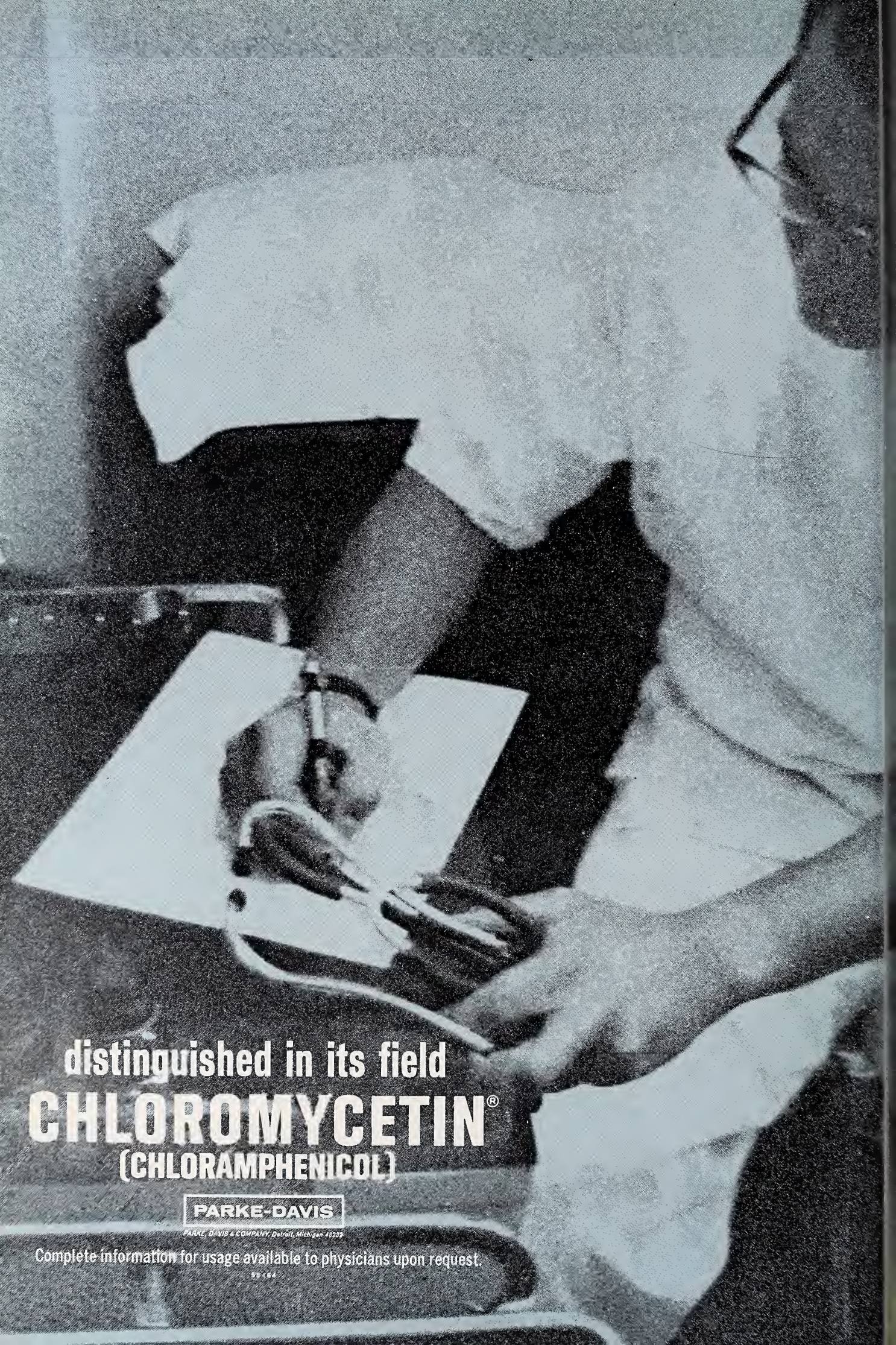
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OCTOBER 1964 *Volume 53, Number 10*

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

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too young to be so tired...

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

CURRENT TRENDS IN THE MANAGEMENT OF THE MENOPAUSAL PATIENT

Gordon W. Jackson, M.D., *Macon*

■ ***There is a trend among gynecologists to regard the menopause as a deficiency state.***

TODAY THE AVERAGE WOMAN has a life expectancy of approximately 75 years, one third of which is lived without the benefit of adequately functioning ovaries. Woman is unique in this respect for virtually in all other animal life ovarian activity continues until death.

Some 40 years ago it was learned that estrogen was produced by the ovaries. It is the advent of estrogen production by the ovaries that causes the changes of the menarche. The subsequent cessation of hormone production by the ovaries is responsible for the menopause with its hot flushes, depression, nervousness, etc.

The Proper Treatment

Most of us were taught that the proper treatment of the menopause consisted of generous doses of sympathetic understanding, mild sedatives or tranquilizers and if absolutely necessary, small amounts of estrogen to get the patient over the acute phase. Is this considered adequate treatment today? The arguments supporting it are:

1. The menopause is a physiologic process. It happens in every woman and to treat it is to interfere with nature.
2. There is the fear of long term estrogen therapy causing breast and uterine cancer.
3. Until recently there have been few convincing clinical reports.
4. Expense and inconvenience.
5. Undesirable side effects such as:
   a. Uterine bleeding
   b. Nausea
   c. Salt retention
   d. Breast tenderness

Let us discuss these more fully. Of necessity one must say the menopause is physiologic and also that it is usually unwise to interfere with nature. However, labor is also a natural physiologic process; yet few, if any, of us would refuse a patient analgesics during labor.

Fear of Cancer

The fear of producing cancer is one of the most common reasons given for not using hormones. Shelton's[1] study seems to repudiate this fear! More recently studies by Wilson[2] and others[3-5] have indicated cyclic use of estrogen and progesterone actually prevents mammary and uterine cancer.

There are some troublesome side effects. The most serious of these is bleeding. Contrary to the opinion of some, I find that patients object to continued, even planned, menstruation after the menopause. Of course, if the uterus is absent then bleeding is no problem. Most of the other side effects are easily handled.

Albright advocated estrogen replacement therapy more than 20 years ago.[6] Arguments in favor of hormonal replacement therapy are that it appears to prevent:

1. Psychologic involution, apathy, negativism.
2. Negative nitrogen balance.
3. Osteoporosis with its pain, fractures, loss of height, and arthralgias.
4. Atherosclerosis, hypercholesteremia, and hypertension.
5. Skin atrophy with its wrinkling, bruising and itching.
6. Cancer of the breast and uterus
7. Mucus membrane atrophy

There are marked physic changes that must occur at the time of the menopause. The woman must realize that she is going through the "change." She may have been able to forget her age previously, but it is now brought to her quite forceably. The children are usually leading independent lives. The husband is preoccupied with his work, and the woman is often left with a feeling of uselessness. Such a cause of depression in previously stable women is not uncommon.[7] In mild and moderately severe cases, estrogen is almost specific.[8,9] The increased sense of well being produced by the androgens is well known by all of us. This is certainly a time when these women need a psychological boost.

Negative Nitrogen Balance

In the wake of negative nitrogen balance, there is a withdrawal of protein from the bone matrix followed by a calcium depletion. The osteoblasts are under direct estrogen stimulation. The more estrogen, the more osteoblastic activity. There is a progressive loss of height, one to five inches, which may be accompanied or caused by compression and fracturing of the individual vertebra.[7] Along with this osteoporosis, there is a weakening of the muscles, tendons and connective tissues with a resulting arthralgia. The 80-year-old lady who suffers a fractured hip can blame it to some extent on the cessation of her ovarism function, some 30 years previously.[10]

Coronary atherosclerosis is ten to 40 times more common in young men than in young women.[11] This is not true with premenopausal oophorectomized women.[12] After the menopause, the incidence of coronary heart disease associated with hypercholesteremia becomes comparable for both men and women of similar age groups.

Estrogenic Deficiency

In the face of prolonged estrogenic deficiency, the skin becomes thin, dry and inelastic. These changes are responsible for the wrinkling, itching, and the ease with which bruises occur. There is a similar atrophy of the mucus membranes which is frequently responsible for atrophic rhinitis and gingivitis. These changes can readily be reversed by the use of estrogen, either locally or systemically.

There are natural aging processes that occur in the breast and genital regions, but these are accentuated by estrogen deficiency. The breast when deprived of estrogen becomes flabby and atrophic. Fat is reabsorbed from the vulva and pubic area and the labia tend to disappear.. The vagina becomes shorter and loses its distensibility. The vaginal mucosa becomes thin, inelastic, friable, and readily susceptible to infection. Similar changes occur in the urethral mucosa and are frequently responsible for bladder symptoms in the menopausal patient. Estrogen is specific for these changes.

Barnes recommends androgens and estrogen in a ten to one ratio with the actual dose being five mgms. methyltestosterone and .5 mgms. stilbestrol daily omitting the first four to six days of the month. He compares this to the insulin needs of the diabetic in that replacement will be just as necessary fifteen years from now as it is at the present time.[10] This has the advantage that it does not have the alarming bleeding effect. The availability of the new oral progesterones makes it practical to replace both chemical components of the woman's hormonal environment. However, the addition of progesterone to the estrogen supplement will result in withdrawal bleeding. This is thought to be beneficial because the progesterone will mature the endometrium and the subsequent shedding will prevent endometrial hyperplasia. Wilson advocates the use of premarin 1.25 mgms. daily with the addition of five mgms. of Provera for the last few days of the cycle.[13] He adjusts the dosage of estrogen by the vaginal cytology smear. He advocates periods approximately every two months. Perhaps the simplest method is to start the patient on one of the oral contraceptives at the age that the patient's menopause is expected. This has the advantage that it regulates the periods, relieves fear of pregnancy, and supplies the deficient hormones. By this method one can plan the periods and explain this to the patient. This explanation usually relieves the concern over the bleeding.

Conclusion

In conclusion, the current arguments both pro and con for hormonal replacement therapy during the menopause have been presented. There is a trend among more of the better known gynecologists to regard the menopause as a deficiency state. This deficiency should be corrected as soon as it occurs and hormone replacement therapy should continue throughout life. Three different plans of approach are presented. Through the use of proper replacement therapy, we are able to allow the post-menopausal patient to avoid their probable fate of hypertension, atherosclerosis, osteoporosis, flabby breasts, and atrophic genitals.

740 Hemlock Street

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1964 — AN EPIDEMIC YEAR FOR RUBELLA (GERMAN MEASLES)

The latest figures released by the National Disease and Therapeutic Index (N. D. T. I.), which is a nationwide survey of private medical practice, shows visits for German measles reached epidemic proportions in the first six months of 1964. N. D. T. I., which measures the number of patient-physician contacts involving various diagnoses, estimated physicians received over 1.8 million visits for rubella (German measles) since January of this year. This represents almost a 500 per cent increase over the same period last year.

Historically, the first half of the year accounts for the largest share of rubella visits. This can be clearly seen in the following table which shows a breakdown of visits for the years 1960 through June, 1964.

U. S. Patient Visits for Rubella (German Measles)
by Calendar Quarter (000)

	1960	*1961*	*1962*	*1963*	*1964*
Jan.-Mar.	65	155	145	105	645
Apr.-June	215	220	215	220	1210
July.-Sept.	135	80	75	165	
Oct.-Dec.	80	65	100	100	
Annual Total	495	520	535	590	1855 (to date)

A regional break of N. D. T. I. information shows that 1964 rubella visits were higher than average in the East, particularly in the New England and Middle Atlantic states. The Eastern half of the country usually accounts for 25 per cent of all visits to private practitioners; rubella visits showed 36 per cent in this region.

Regional Visits for Rubella (German Measles)

	Jan.-June 1964	*All Visits to Private Phys. July '63-June '64*
East	36%	25%
Mid-West	20	29
South	28	28
West	16	18
	100%	100%

N. D. T. I. further reported that an age breakdown on German measle visits showed that the epidemic was confined almost entirely to children and teen-agers with only about one-fifth of the visits being accounted for by adults. The sex breakdown for rubella was about average with females accounting for approximately 60 per cent of the visits to private physicians.

Age of Patients with Rubella

Age	*Jan.-June 1964*		*All Visits to Private Practitioners July '63-June '64*	
0- 9	61%	82%	15%	25%
10-19	21		10	
20-39	12		24	
40 & Over	6		51	
	100%		100%	

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee/August 8, 1964

Approved: July 19 Executive Committee minutes; Treasurer's Report.

Appointed as Allied Medical Careers Club Representatives from MAG: T. Elder Pearce, Jr., M.D., Atlanta; Donald W. Singleton, M.D., Atlanta, (Alternate), and Lee Howard, Jr., M.D., Savannah, and Artnur M. Hendrix, M.D., Canton; or Fred M. Bell, M.D., Atlanta, (Alternate).

Discussed: Letter from the Georgia Hospital Association asking MAG consideration of selling them a parcel of land for a headquarters building. Request turned down by Executive Committee because of tax situation and possible MAG expansion in the near future.

Discussed: Deferrment of meeting between State Board of Health and Executive Committee.

Voted that MAG would not participate in Georgia Exposition of Commerce and Industry.

Relative Value Subcommittee/August 23, 1964

Discussed and Explained: The concept of a relative value study, philosophically and statistically, by Mr. Jere Atchison, Georgia State College, Atlanta. Members present, in addition to the committee members, were representatives of Specialty Societies, who will in turn pass on the information to County Medical Society officers, etc.

THE USE OF NEBULIZED STEROIDS

Lester Rumble, Jr., M.D., *Atlanta*

■ ***The use of nebulized steroids in conjunction with the Bird Mark VII ventilator is discussed.***

CHRONIC OBSTRUCTIVE lung disease offers a number of challenges to the medical profession. Its etiology is ill-defined and of multiple causes. Its onset is insidious, making early diagnosis difficult. Objective measurements of ventilatory and respiratory function are not yet standardized to a point of absolute accuracy. These disease states are characterized by remissions and exacerbations, influenced by physical, allergic, bacteriological, and emotional factors. Their life history cannot be predicted except that progression is anticipated. Evaluation of therapeutic effectiveness is reduced to a clinical assessment of immediate results primarily on the basis of symptomatic control. It is the purpose of this paper to present trends observed with the use of nebulized steroids in conjuntion with the Bird Mark VII ventilator.

Existing Confusion

There still exists confusion as to the etiology, definition and inter-relationship of asthma, bronchitis, and emphysema. These disease states have one common denominator — a reduction in the caliber of the airways. Diminution in airway diameter leads to increased airway resistance and eventually to dyspnea, because of the increased work of breathing. Unfortunately, many patients do not present themselves for therapy until extertional dyspnea becomes a problem. At this point the work of ventilation demands more oxygen for respiratory muscles than can be provided through airways unevenly obstructed and alveoli unevenly ventilated and perfused. Equally unfortunate is the fact that many physicians tend to overlook the significance of a chronic cough and excessive sputum production. Since diagnosis of early airway obstruction is relatively simple, prompt institution of therapy should occur to prevent increasing obstruction, emphysema and eventually cor pulmonale. Current therapy emphasizes pharmacologic anti-inflammatory, anti-cough and anti-spasm measures. Mechanical methods of relieving these problems have been used to a lesser extent since they are less well understood.

Intermittent positive pressure breathing has been the subject of much controversy over the past ten to 12 years. All aspects of this discussion are well covered in a recent article by Dr. Sheldon. The following statement climaxes his discussion of the flow-pressure characteristics of the many devices available today:

> "Clinical experience suggests that to achieve maximum effectiveness in most patients with obstructive lung disease, an IPPB device must be capable of delivering slow inspiratory flow rates (6-30 L/min), at low cycling pressures (10-12 cm. HOH) and with a sufficient dilution of the bronchodilator (1:10-1:20). There is a need for long term studies of IPPB effectiveness under these circumstances, to determine whether prolonged therapy, in the early phase of chronic airway obstruction, may prevent the development of one form of emphysema or forestall its relentless progression." The ventilator having a truly independent inspiratory flowrate is the Bird. This departure from the conventional machines (Bennett, Air-Shields, Monaghan, Emerson, Drinker, Mine-Safety, etc.) instigated such a long range study.

The evaluation of therapy with mechanical devices is made primarily on a clinical basis, as is the evaluation of pharmacologic measures. Clinical improvement may not coincide with demonstrable objective change in ventilatory studies. Changes in objective measurements do not always coincide with subjective improvement. Proper use of the ventilator should produce some reduction in cough, sputum production, and bronchial spasm. The following basic principles are employed in utilizing the Mark VII:

1. Pressure and flow-rate settings are "balanced" so that maximum chest expansion takes place at the lowest flow setting the patient will tolerate. Oxygen or air may be used.
2. The sensitivity is adjusted so that a minimal "sucking" effort at the beginning of inspiration is required to initiate flow.
3. Once flow has begun, the patient must relax and permit the ventilator to complete his inspiration. A nose clip may be required at first to prevent leakage of air through the nose, and the lips must be tight around the mouthpiece. He must not "help" the machine.
4. The nebulizer is filled with 80 drops (4.0 cc.) of water or 4.0 per cent saline or normal saline or 20 per cent alcohol (80 proof vodka

diluted one-half with water). To this is added four drops of Micronefrin (racemic epinephrine). Other detergents and bronchodilators are not advised.

5. Therapy is carried out at least three times per day, or more often if desired. Each treatment should last a minimum of 15 minutes. The sitting position (reclining about 20 degrees from the horizontal) is preferred.
6. The "air-mix" valve is always in the pulled-out position. This activates the "clutch" mechanism which helps prevent premature shutting-off of the machine and probably accounts for much of the success achieved.

Benefits from this regimen are usually seen within three weeks. The patient must learn to use the machine properly, requiring from one to several days. During the first few days the patient may complain of soreness in the upper abdomen and lower sternal areas. This represents muscle pain and possibly costo-chondral discomfort because of increased mobility and expansion of the chest. After two to three weeks many patients feel as though they are worse, primarily because of increased cough. Apparent worsening is the result of reaching secretions inspissated in distal bronchioles which must be coughed up. Generally this clears with nothing other than continued therapy. An occasional patient will complain of nervousness requiring a decrease in the amount of bronchodilator. Other measures of therapy are not discontinued until such time as effectiveness of IPPB therapy is readily demonstrable.

Seventy-five per cent of 300 patients have experienced improvement in cough and ease of sputum production after three to four weeks on this regimen. The problem of spasm (wheezing) has been the most difficult to control. Although it was planned to use "pure" IPPB therapy in order to evaluate the Bird Mark VII, the possible advantage of adding steroid therapy outweighed this aspect of "purism."

Steroid administration has been an important adjunct in the management of asthma for 15 years.[1] Given orally, over long periods of time, these drugs are capable of producing undesirable side effects. The retention of water is probably the most significant, particularly if pulmonary hypertension or right ventricular strain is present. The production of gastro-intestinal symptoms is frequent, sometimes leading to peptic ulceration. As early as 1951, Gelfand[2] successfully nebulized corticosteroids suspended in saline for the treatment of asthma. Since this time others[3-7] have attempted aerosol steroid therapy with varying degrees of success. Early limitations were unpleasant taste, irritative side effects and lack of effectiveness (probably due to particle size).[8]

In 1962 a preparation of dexamethasone phosphate sodium* was made available in which 95 per cent of the particles were of less than five microns in size. This preparation, propelled by a mixture of fluorochlorocarbons was supplied in plastic cases for aerosol administration. The results of this type of administration were encouraging and led to the combination of this steroid in the same inhaler with isoproteronol.** Several authors[9-11] have been impressed with the efficacy of this type therapy. The rationale of topical steriod application to the tracheobronchial tree is similar to that of topical application elsewhere. The desired anti-inflammatory effect may be achieved at dosage levels below those required for systemic effect. Topical application does not depend on an effective blood supply. The encouraging results with this method suggested that this might be a useful adjunct to IPPB therapy.

Method

Nebulized dexamethasone was instituted in 55 patients to evaluate effectiveness in symptomatic control. Prior to the availability of a special tablet the ophthalmic preparation of Decadron was employed.

The preparation of dexamethasone for nebulization is a small tablet containing 1.0 mgm. of the active principle and enough sodium chloride to make a normal saline solution when dissolved in 4.0 cc. of water.* It contains none of the ingredients customarily used to bind tablets together. This tablet is added to any of the above named solutions in the nebulizer. It dissolves immediately. Since it does contain salt, the customary 4.0 per cent saline is not used as a diluent. Normal saline is used instead. The decadron imparts a barely discernable "smoky" taste.

The dosage schedule is patterned after oral administration. For the first three weeks, one tablet is added to the nebulized solutions three times each day. During the next two weeks it is used two times each day, then reduced to one tablet daily as a maintenance dose. After three weeks of maintenance, administration is stopped and the patient uses only basic nebulized solutions. If symptoms recur at any point in the attempted reduction, the three per day level is resumed for one week, then reduction attempted again.

In terms of total dosage, this represents 3.0 mgm. of decadron daily for the first three weeks decreasing to 1.0 mgm. per day during maintenance. Since this is in nebulized form it would be expected that one-half of this dose would be lost during

*Decadron phosphate—Merck, Sharp & Dohme.
**Pro-Decadron inhaler—Merck, Sharp & Dohme.

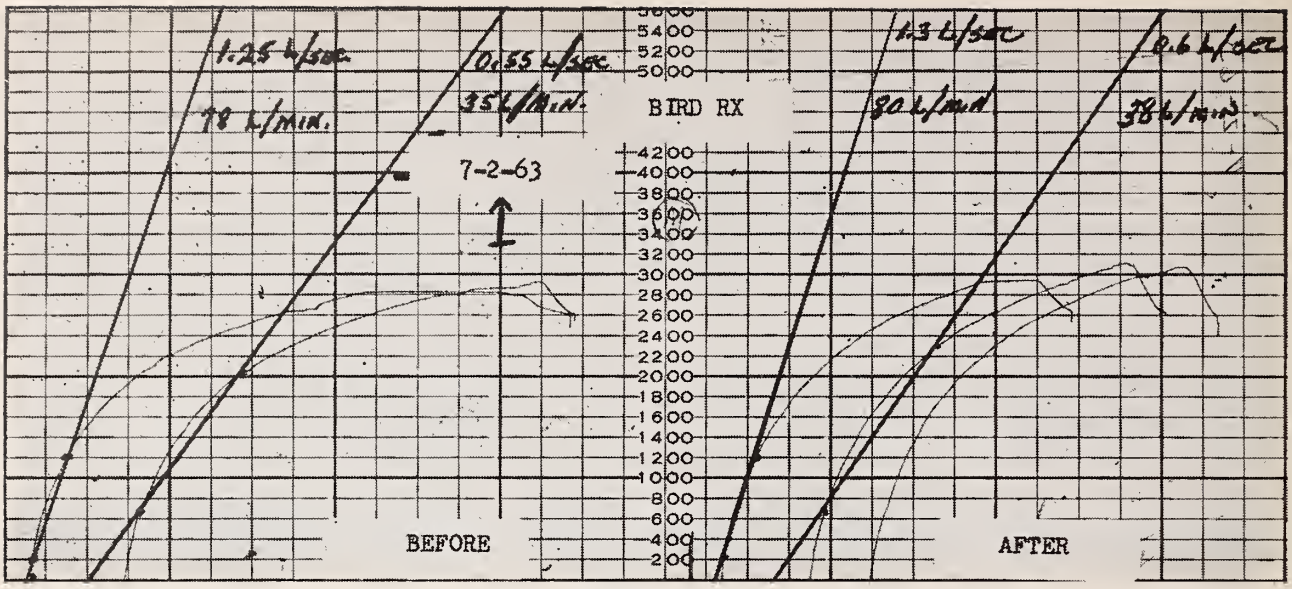

Figure 1-A

expiration. The other half represents that amount available for possible systemic absorption.

To estimate the degree of systemic absorption the total circulating eosinophile count of six patients was checked, while they were not receiving steroids. All were found to have counts in excess of 350 cells/cu mm. After three weeks of minimum oral steroid therapy (Prednisolone 10 mgm. daily) all these six had eosinophile counts in the normal range. At this point oral therapy was discontinued and after six weeks their counts were again elevated. When checked after six weeks of nebulized steroid all six patients showed a continued elevation of the total eosinophile count. This, coupled with the absence of excessive weight gain, puffiness, etc., led to the conclusion that systemic absorption, even on 3.0 mgm. per day, is minimal.

Results

Before describing overall results, one case warrants consideration. This patient represents an optimal result at the time of this presentation.

Mr. S. H., age 56, a non-smoker, was first seen in July, 1963. At this time, his F.E.C. (3.0 sec.) was 2800 cc. or 70 per cent of the predicted normal-4000 cc. The M.V.V. (Maximum Voluntary Ventilation) was 50 per cent of estimated normal and his RV/TLC was 54 per cent (normal 35%). His history began about ten years ago with the onset of frequent upper respiratory infections and a chronic cough with marked sputum production. Wheezing began four years ago, and exertional dyspnea three years ago. At the time, he could walk one block (level) at his own pace and could climb one flight of stairs with difficulty. After two months of IPPB therapy the results depicted in Figure 1-A were achieved. Notable is the improvement in flow rates after therapy. At this point the patient decided to discontinue therapy. Three weeks later he returned because of the worsening of all symptoms. On 8-12-63 he procured a machine and began therapy at home four to six times daily. After four weeks, he was begun on the nebulized steroid program. The results are shown in Figure 1-B and represent the use of steroids for four weeks.

Monthly evaluations since this time have shown an increasing benefit. No wheeze is now detectable. Cough and secretions are absent and for 45 days the patient has not had any steroids. His activity level is markedly improved and the last F.E.C. (3.0 sec.) and flowrates demonstrate almost normal values (Figure 1-C). For two months he has used the ventilator twice daily, without Decadron, and has maintained his improvement. Repeat evaluation of his residual volume showed a significant decrease.

Twenty-seven female patients were placed on the above regimen. Eighteen were designated as asthmatics because of longstanding histories of broncho-spasm. The remaining nine were considered as obstructive emphysema, broncho-spasm having become prominent after many years of chronic bronchitis. All have some increase in radiolucency and varying degrees of increase in the ratio of residual volume to total lung capacity. Ages range from 21 to 82 years with 16 being in the 50-60 age group. Each had been on the standard IPPB regimen for three weeks to 14 months prior to beginning nebulized steroids. Sixteen had been on steroids at some time in the past and, of those, nine were on oral steroids at the time. Five have been weaned from oral steroids for nine months and two require intermittent oral medication. The other two are still on oral medication, but at a reduced dosage scale. These latter two are the only patients who show

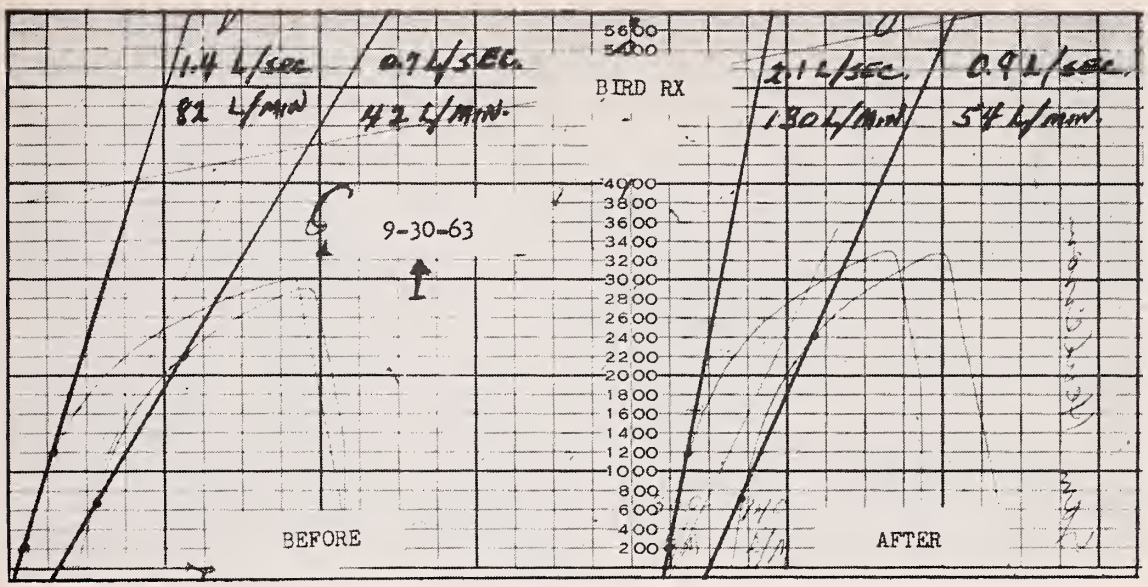

Figure 1-B

evidence of facial edema which they had for some time before beginning the nebulized drug.

Only two patients in this group have been successfully weaned from nebulized cortisone. Three have been successfully maintained by substituting the use of a pro-decadron inhaler. Four patients experienced no benefit after a 30 day trial so the drug was withdrawn. None of these had had previous steroid therapy. The remaining 18 are on a maintenance schedule of 1.0 mgm. per day and have been controlled for from three weeks to 18 months. Six have maintained adequate control of cough, secretions and spasm and have had a steady improvement in exertional dyspnea. Four have controlled the first three symptoms, two have controlled the cough and secretions and one has had improvement only in her cough. Five are too early in the course of therapy to estimate results.

Twenty-eight males ages 12 through 85 were tried on this regimen. Four of these were classified as asthmatics and the remaining 24 as chronic obstructive pulmonary emphysema. Thirteen had been on oral steroids in the past and eight were on oral steroids at the time. Two of the eight have been weaned from the oral medication. The length of treatment in this group has been one month to 18 months and one patient has been able to maintain improvement for 14 months by using only the pro-decadron inhaler.

Results were poor in ten patients of this group. Two deaths occurred but these were not related to steroid therapy. Of the remaining 16, eight have achieved control of cough and secretions and eight have controlled these symptoms and increased their exercise tolerance. Side effects have not been seen except in one patient who manifested symptoms of an infection on two occasions after beginning the nebulized steroid.

Discussion

The majority of these 55 patients had reached

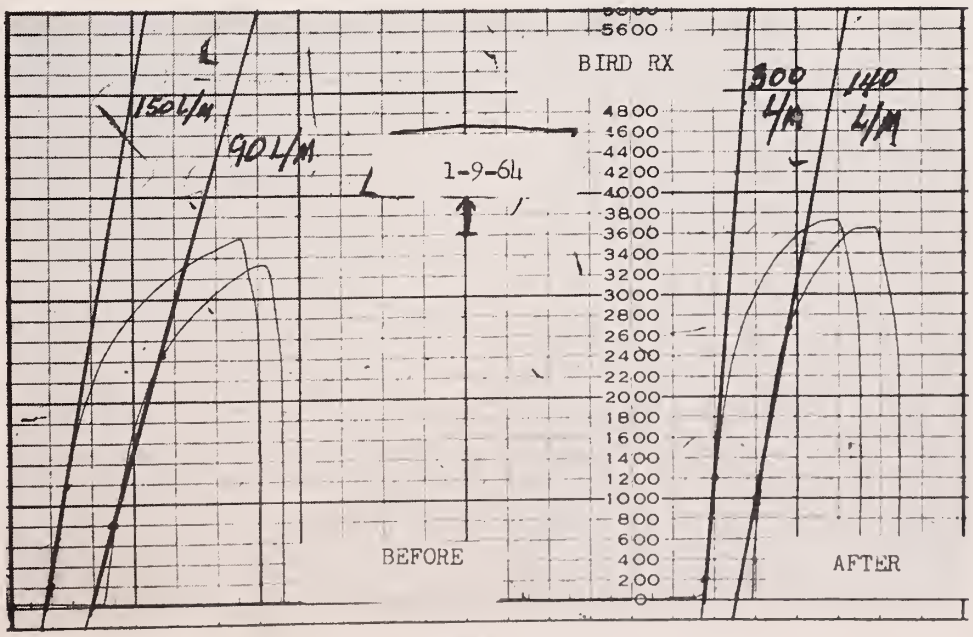

Figure 1-C

the stage of dyspnea on minimal exertion prior to the institution of ventilatory therapy. Each had utilized the machine for at least three weeks prior to beginning steroids. The results represent further subjective improvement and cannot be interpreted as due solely to the addition of decadron. It is interesting that only 50 per cent of these patients experienced definite benefit. The majority of those who did improve still did not show complete absence of bronchial spasm; however, when the drug was withdrawn, spasm usually increased. Except in three patients, exacerbation of symptoms occurred within one week when the drug was discontinued.

Respiratory Infections

In the course of this study, respiratory infections were encountered in 35 of the 55 patients. These were of varying severity, but the major problem was recognition. If the patient is effectively using the ventilator then the symptoms of infection are sometimes masked for three to seven days. The patient does not feel as well, cough and sputum increase and then he may suddenly become quite ill. The addition of Decadron seems to prolong the latent period. For this reason, each patient is carefully cautioned to be aware of any increase in cough that persists for more than 24 hours, so that antibiotics may be administered if there is any doubt about the possibility of acute infection. The addition of nebulized steroids did not increase the frequency of infection except in one patient. Mr. A. E. J., age 62, developed an infection on two occasions one week after starting on steroids. These occurred two months apart and represented his only episodes this winter. Except in this patient, the dosage level was increased to 3.0 mgm. per day and in some instances an increased oral dose was utilized during the period of infection.

Earlier studies have indicated that steroids can be nebulized into the tracheobronchial tree in amounts sufficient to produce detectable improvement in wheezing. The impression gained in this series tends to confirm this observation. Since all patients had been under prior observation and therapy, the improvement achieved with the addition of this preparation can be attributed only in part to the drug. Larger doses were used than have been previously reported and yet clinical evidence of systemic absorption was not seen. The forced expirogram was used to evaluate changes. All patients were well accustomed to this procedure so that demonstrated improvement is unlikely to be the result of a learning factor.

The most striking results occurred in those patients with relatively uncomplicated asthma. Those patients who failed to achieve benefit were in the far advanced stages of emphysema, all being over 60 years of age. Patients who had responded previously to oral steroids achieved uniformly better results. No effort was made to evaluate oral steroid therapy in those patients failing to respond to the nebulized drug.

Summary

To the standard long term use of supervised IPPB therapy with the Bird Mark VII, a special preparation of dexamethasone phosphate was added. Periodic evaluation of 55 patients showed improvement in 50 per cent. This improvement was manifested by a decrease in one or more of the cardinal symptoms — cough, sputum production, wheezing, and dyspnea. Although dosage levels as high as 3.0 mgm. per day were maintained over varying periods of time, no evidence of systemic absorption was observed when only nebulized steroid was used. The results achieved point to a need for further study of the usefulness of this preparation, particularly in the chronic asthmatic patient. Its usefulness in longstanding chronic obstructive emphysema seems less impressive, but also worthy of continued evaluation.

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THE DISEASE WHICH "LICKS THE JOINTS" AND "BITES THE HEART"*

Isaac Goodrich, M.D.,** *Augusta*

■ ***The full recognition of this disease was literally thousands of years in the making.***

How true was Lasègue's description of the disease now known as rheumatic fever. The first recorded description of acute polyarthritis is credited to Hippocrates (circa 400 B.C.):

> "In those, in whom pains and swelling come and go around the joints, and these not after the manner of gout in the foot, one will find large viscera and in the urine a white sediment. . . . Now this disease occurs in those who in childhood and youth were wont to have nose-bleeding but have since lost it."[24]

The Father of Medicine explained this condition on the basis of his doctrine of humoral pathology, although the diet may have been included by his statement: "When tubercles (phymata) or pains attack the joints after fever, such persons are using too much food." [17] Unfortunately, Hippocrates did not go too far in his classification of "arthritis" even though he did see a wide variety of the clinical types. His therapeutic regimen consisted primarily of venesection, and this was to remain in the forefront of the physician's treatment for centuries.[18]

A trio of important writers appeared in the first and second centuries after Christ. Celsus seems to have unknowingly discussed rheumatic fever when he wrote: "Children in whom there has been nose-bleeding, which has ceased, are sure to be troubled by pains in the head, or they have severe joint ulceration, or they also become debilitated by disease." Galen applied the Hippocratic humoral theory to arthritis and seems to have distinguished gout as a separate entity. Aretaeus in Byzantine perhaps referred to rheumatic heart disease when he said: "In many cases the gout has passed into dropsy and sometimes into asthma, and from this succession there is no escape."[20,24]

During the Dark Ages which followed the fall of the Roman Empire, Paul of Aegina in the seventh century Byzantine empire, and Avicenna, an Arabian physician of the late tenth and early 11th centuries, continued the Hippocratic hypothesis and therapy of "arthritis." In the latter part of the 13th century a Byzantine writer, Demetrios of Pepagomenos, observed that "gouty fluxion" (a term used interchangeably at that time with rheumatism, podagra, gout and arthritis) could be carried to the brain, liver and heart. Was this another of the earlier notations of rheumatic heart disease?[20,22,24]

The Term Rheumatism

The terminology of the disease received an important step forward in the papers of Guillaume de Baillou (1538-1616). In a posthumous work published in 1642, he became the first person to use the term rheumatism to describe acute polyarthritis as a separate disease entity. Baillou was the last great humoralist. He attempted to introduce the concept of a generalized humoral disorder. For this and other thoughts which made rheumatism a clinical entity, Baillou is sometimes called the Father of Rheumatism.[22,24,39,41]

The next important figure to write on the subject was the Father of English Medicine, the English Hippocrates, Thomas Sydenham. In 1676 he gave the first satisfactory clinical description of acute rheumatism in his *Observations Medicae:*

> "The Disease comes on at any time, but especially in the Autumn, and chiefly siezes those that are in the Flower of their Age. . . . It begins with shivering and shaking and presently heat, restlessness and thirst; and other symptoms which accompany a Fever. After a

*Lasegue, 1884.

**Dr. Goodrich was a senior medical student at the Medical College of Georgia, Augusta, at the time this paper was written in the spring of 1964. He is presently an intern at the Columbia-Presbyterian Medical Center in New York City.

day or two, and sometimes sooner, the Patient is troubled with a violent Pain, sometimes in this, sometimes in that Joint, in the Wrists and Shoulders, but most commonly in the Knees. It now and then changes places and seizes elsewhere, leaving some redness and swelling in the Part last posessed. . . ."

Syendam's explanation for the etiology of acute rheumatism was the "morbific matter in the system." His treatment, as the ancients', was primarily bleeding.[24,39] Then, in 1686, he clearly described the chorea which now bears his name (although he did not correlate it with acute rheumatism):

"St. Vitus's dance is a sort of convulsion . . . it shows itself by a halting, or rather an unsteady movement of one of the legs, which the patient drags. Then it is seen in the hand of the same side. The patient cannot keep it a moment in its place, whether he lays it upon his breast or any other part of his body. Do what he may, it will be jerked elsewhere convulsively. If any vessel filled with drink be put into his hand, before it reaches his mouth he will exhibit a thousand gesticulations like a mountebank. He holds the cup out straight as if to move it to his mouth, but has his hand carried elsewhere by sudden jerks. Then, perhaps, he contrives to bring the liquid off at a gulp; just as if he were trying to amuse the spectators by his antics."[26]

The St. Vitus dance to which Sydenham referred had its terminological origin centuries earlier. It was originally applied to "dancing mania, a form of hysteria" which became widespread in Europe in the 15th century. Following such an outbreak in Strasburg in 1418, the chief magistrate of that city directed those "afflicted" to go to the Alsatian village of Zabern to pray at the chapel of St. Vitus. Due to the resemblance of the movements of those individuals "seized" with this mass hysteria to those of chorea, the term St. Vitus' dance was later applied to those afflicted with the latter disease.[31] The direct relationship of chorea to rheumatic fever was not recognized until the 19th century.[28,39]

Endocarditis

In 1709 Boerhaave noted that "rheumatism" attacked ". . . sometimes the Brain, Lung and Bowels." That same year Lancisi gave the first description of endocarditis (although that term was not used) as a postmortem finding. The year 1776 saw van Swieten suggesting a correlation between rheumatism and cardiac disease when he wrote that ". . . sometimes when the pain of rheumatism in the limbs ceases, there arises an anxiety of the breast, a palpitation of the heart, and an intermitting pulse." But it was not until 1788 and 1789 that David Pitcairn and Edward Jenner, respectively, became the first individuals to definitely associate rheumatic fever and heart disease.[15,22,24,34,41]

By the beginning of the 19th century physicians were beginning to realize that the term "rheumatism" embraced several distinct diseases. Haygarth in 1805 stated: "The term rheumatism . . . includes a great variety of disorders which ought to be distinguished from each other by different names." Four years later, David Dundas, in an article entitled "An Account of a Peculiar Disease of the Heart," described a case of rheumatic cardiac disease so severe ". . . that the pulse of the patient could be counted by looking at the motions of the bed."[22] Then, in 1812 William Charles Wells gave the original description of rheumatic subsutaneous nodules (although he had made the initial observations as early as 1802). It is also interesting to note that during the first decade of the 19th century Wells described a rash with acute rheumatism. Richard Bright noted in 1831, and again in 1839, "roseola annulata" in association with chorea. Unfortunately, neither of these latter two men specifically related dermatosis to rheumatic fever.[22,24,41]

A most important figure in the history of rheumatic fever was Jean Baptiste Bouillaud. In his *Traite Clinique des Maladies du Coeur* published in 1835 he originated the term endocarditis, pointed out that it was one of the disease's most imporant manifestations and gave a very poignant description:

"The number of either albuminous or verrucous vegetations is very variable; the same is true of their size and configuration. Some are no larger than a millet seed; others are the size of flax seed or a small pea. They are sometimes isolated, scattered, discrete, as it were, while others are united in groups, confluent or so dispersed as to imitate cabbage flowers. Their form is often rounded, spherical, but often elongated, cylindrical or flattened. Their surface is sometimes smooth and polished and sometimes unequal and irregular."[32,40]

Bouillaud is generally credited with the first accurate description of rheumatic heart disease. In 1839 he emphasized the association of rheumatic fever and heart disease in his famous Law of Coincidence: "'In the great majority of cases of diffuse articular rheumatism with fever, there exists in a variable degree a rheumatism of the sero-fibrous tissue of the heart. The coincidence is the rule, and the non-coincidence is the exception."[20,24,41]

The next major development was the discovery of the benefits of salicylates by Thomas Maclagan in 1874. He thought that malaria and rheumatic fever were closely related, although distinct, diseases. Around 1630 a group of Jesuits had found a remedy for malaria in the bark of the cinchona which grew on the marshy banks of the Amazon River (where the occurrence of malaria was high). Thus, Maclagan

concluded that a cure for rheumatic fever might be found in damp, low lying sites, where the incidence of acute "rheumatism" was high. The end result was his extraction of salicin from the bark of the willow tree (of the natural order Salicaceae). Within three years of its discovery, salicin and its derivates (salicylic acid, sodium salicylate) were in general therapeutic use.[24,41]

Aschoff Bodies

It would appear that the myocardial inflammatory lesions now known as Aschoff bodies were first reported by Goodhart in 1879, but without reference to their specificity. Not until 25 years later did Ludwig Aschoff announce that these lesions were specific for rheumatic fever.[12,24,41] In 1887 Alfred Mantle gave the first published consideration of the bacterial origin of rheumatic fever. He felt that ". . . rheumatism was produced by the agency of a bacterium, which . . . in most cases entered the system through the lymphoid structure of the tonsil."[23] The beginning of the 20th century found Poyton and Payne isolating a streptococcus from the throat of a patient with acute rheumatic fever. With this organism they produced experimental arthritis with rheumatic fever-like lesions. These authors were among the first to support the streptococcal etiology of rheumatic fever.[6,28]

In 1902, before the modern theories of allergy, Menzer expressed the belief that the inflammation of rheumatic fever was caused by a union of antibodies with bacteria in the involved tissues.[30] During that same year Brunton made the first suggestion of the surgical possibility of relieving blood flow impedement in mitral stenosis.[2,3] Twenty-one years later Cutler performed mitral valvulotomy for the first time. [1,32] However, it was not until the later 1940's and 1950's that cardiac surgery reached the clinical level.[1,9,14]

The Pathologists

Between 1920 and 1940 some of the most outstanding contributions to the knowledge of rheumatic fever came from the pathologists. Klotz, Pappenheimer, Von Glahn, MacCallum, Klinge, Swift, Gross and others showed that rheumatic fever was a systemic disease with lesions throughout the body, the most important being those of the cardiovascular system.[41] In 1924 the Carey-Coombs murmur was described (a ". . . blubbering apical mid-diastolic murmur.").[7] During that same year the first fairly large study of electrocardiographic abnormalities in acute rheumatic fever was published.[5]

The first description of C-reaction protein was given by Tillett and Francis in 1930.[35] Within two years Todd had given the initial report on the use of the ASO titer as a diagnostic test for rheumatic fever.[36] The last year of the 1930's saw the beginning of sulfonamide prophylaxis, a giant step forward in the prevention of recurrent rheumatic fever. Results of two different groups indicated that the daily administration of sulfonamide drugs (sulfanilamide at that time) markedly decreased streptococcal infections and recurrent attacks of rheumatic fever.[4,33]

In 1944 Jones gave his classic listing of criteria for the diagnosis of rheumatic fever. Eleven years later the Jones criteria were modified by the American Heart Association.[21,27] During the mid-1940's it became apparent that penicillin therapy did not favorably affect the course of acute rheumatic fever.[10,25,37] But, in 1946 Hansen proposed that pencillin might be of similar advantage as sulfonamides for prophylaxis against rheumatic recurrences.[13] Two years later Massell, Dow and Jones became the first to demonstrate the efficacy of penicillin prophylaxis in a study involving patients over the years 1946 and 1947. The risk of rheumatic recrudescences in the era prior to continuous antibiotic prophylaxis was very great (25-75%). However, by 1955 there had been reduction of over 90 per cent in the incidence of recurrences with prophylactic antibiotic use.[29]

The Effect of Steroids

In 1949 another milestone in rheumatic fever therapy was reached with the first report on the affect of steroids as anti-inflammatory agents in this disease.[16] Today the use of steroids is recognized as an invaluable part in the therapy of acute rheumatic carditis. It is also interesting to note a report in 1952 by Bland and Jones in which they found epistaxis to occur in over one-fourth of patients with acute rheumatic fever.[1] Over 2300 years earlier Hippocrates had stated that ". . . this disease occurs in those who in childhood and youth were wont to have nose-bleeding. . . ."

The history of rheumatic fever has been long, but slowly progressive. Today much is still unknown concerning the disease. Many problems concerning etiology remain. The mechanism of the exact relationship of beta hemotytic streptococcal infection to rheumatic fever continues to be far from clear. Presently the death rate of rheumatic fever and its complications is one-sixth that of a half-century ago. The reason for this reduction is not entirely clear as the death rate was decreasing prior to the antibiotic era.[11] Problems in diagnosis persist. There is still no single specific test for rheumatic fever, although new tests are constantly being sought. Just recently a disproportionate elevation of gamma-1A

globulin has been found in patients with acute rheumatic fever.[19] Another dimension to the complexity of cardiac changes in association with arthritis was made lately. It has been proposed that there exists a form of chronic deforming arthritis in rheumatic fever, the so-called Jaccoud's disease.[38] Finally, there are many therapeutic difficulties to overcome. It has been estimated that one-fourth of patients with rheumatic fever will eventually die from heart disease or some complication developing directly from it. Even today about three per cent of those with group A streptococcal infection will subsequently develop an initial attack of rheumatic fever.[8] Nevertheless, we have travelled a long way from the days of yellow-bile, black bile, phlegm, and blood-letting.

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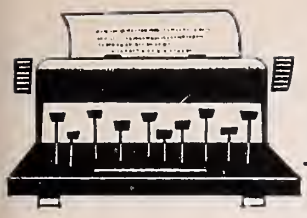
IN MEMORIAM

Norman A. Welsh, M.D.

President, American Medical Association

1902 — September 3, 1964



EDITORIALS

The Transparent Woman

THE INNER WORKINGS of the human body were strikingly revealed in a life-size transparent model which was on display at the 50th Annual Southeastern Fair, October 1-10, 1964.

The exhibit, produced by the American Medical Association, delighted anyone who has ever wondered what goes on inside of him.

Clearly shown within the plastic female model are the organs, the blood system and the nervous system.

The "Transparent Woman" represents a rare addition to a rather exclusive society. There are only nine other such fullsize models in the United States, all permanent installations.

However, the A.M.A. exhibit was designed specifically for traveling so it could be shown throughout the country. The "Transparent Woman" has its own specially-built case from which it can be easily wheeled out and set up.

The model is 5 feet, 7 inches tall and corresponds generally to the statistical, average American woman.

Through a built-in tape recording system, a 15-minute message describes the function of each organ and system which is illuminated individually as it is discussed.

Every effort was made to make the model as true to life as possible. Five layers of plastic were used from front to back to show realistically and clearly the depth and location of organs lying deep within the body.

Two years in the making, the exhibit combines the talents of medical illustrators, physiologists, health educators, and exhibit craftsmen.

One of the main production problems encountered was making the model sturdy enough to withstand the rigors of shipping. This was solved by giving it a "skin" of plastic as tough as an airplane's windshield. Barring a serious mishap, the "Transparent Woman" now is given a life expectancy of at least ten years.

Medical Society Sponsorship

Fulton County Medical Society sponsored the exhibit which was held in the Health Plaza at the Fair. Chairman of the Fulton County Medical Society's Committee on Public Relations, J. Frank Harris, M.D., was in charge of the exhibit, and physician members of the society were available to explain the exhibit and answer any questions.

Any authorized medical society may obtain the Transparent Woman from the Exhibit Section of AMA. Freight charges are levied from Chicago to the exhibit's destination and back to Chicago. This is the only charge. As the exhibit is a popular one, reservations are advised six to 12 months in advance.

More Than Just Another Meeting

THE AMERICAN MEDICAL ASSOCIATION convenes over 1,000 meetings each year to "promote the science and art of medicine and the betterment of public health." Certainly most physicians are familar with the AMA Annual and Clinical Sessions, the AMA Annual Congress on Medical Education and Licensure, and other AMA events depending on the doctor's individual interests. Yet the purpose of this editorial is to emphasize the importance of a little-known but most meaningful AMA sponsored meeting held annually and called the AMA Public Relations Institute.

The AMA "P.R." Institute

Every state medical association and county medical society is invited to send their officers and public relations chairman to the AMA "P.R." Institute. This year's program was proof-positive of why state

and county societies should take advantage of the Institute. The 1964 meeting held August 20-21, in Chicago was a prime example of not only *what* medicine can do to better it's public relations — but also *how* medicine can do just this. Specific details were given as to the best ways and means the profession can improve it's public image — and so serve the public.

Subjects emphasized and discussed included the following projects: Organizing Effective Speakers' Bureaus; the Right Way for a Society Mediation Committee to Handle Greivances; The Guarantee of Providing Health Care for All; Press, Radio and T.V. Relations; Working With the Auxiliary; Using Educational T.V. etc.

Many of these same subjects will be presented at the Medical Association of Georgia Annual County Society Leadership Conference to be held February, 1965. This type program is the "nuts and bolts" of a basic public relations approach to the duty and function of a county medical society. These are the "must" projects that help the wheels of modern medicine in promoting the art of medicine and maintaining the image so necessary to the actual practice of medicine .

Diabetes Mellitus

In 1963, 516 deaths from diabetes mellitus recorded in Georgia ranked it as the tenth leading cause of death in the state. Surveys indicate that approximately 17 per 1,000 of the population have diabetes. Hence, we estimate there are 68,000 cases in Georgia, but probably half of them do not know they have the disease. To better serve them, the Georgia Diabetes Association was organized in 1958 by a group of ten physicians during the annual meeting of the Medical Association of Georgia. It is an affiliate of the American Diabetes Association, and has the same general objectives of professional education, patient education, education of the general public, and case finding and research. The Association is mailing to physicians in this state a pamphlet entitled "Finding The Unknown Diabetic: The Physician's Role." It is hoped that every physician will support the state Diabetes Association and its program. The annual membership dues and contributions are tax exempt.

On behalf of the diabetes association and the diabetics, thank you for your help.

Lester M. Petrie, M.D.
Secretary, Georgia Diabetes Association

1964 CALENDAR OF MEETINGS

State

October 7-December 23—Continuing Education Courses sponsored by the Medical College of Georgia—"Psychosomatic Medicine Conferences," 12 weekly sessions, Wednesday evenings from 7:30-9:00 p.m.

November 2-5—Postgraduate course on Fractures and Other Injuries sponsored by the Committee on Injuries of the American Academy of Orthopedic Surgeons, Riviera Motel, Atlanta.

November 10-12—Continuing Education Courses sponsored by the Medical College of Georgia, "Muscular Skeletal Problems in Children."

May 2-4, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

October 22-24—Symposium on "Modern Concepts of Nutrition and Heart Disease," sponsored by the Mound Park Hospital Foundation, Inc., St. Petersburg, Fla.

November 11-14—American Academy of Neurological Surgery, Key Biscayne Hotel, Miami, Fla.

November 16-18—Medical Society of District of Columbia, Statler-Hilton Hotel, Washington, D.C.

November 16-19—Fifty-eighth Annual Meeting, Southern Medical Association, Memphis, Tenn.

November 18-21—Congress of Neurological Surgeons (14th) Bal Harbour, Fla.

November 28-29—American College of Chest Physicians (interim meeting), Fontainebleau Hotel, Miami Beach, Fla.

November 29—Sixth National Conference on the Medical Aspects of Sports, in conjunction with the AMA Clinical Meeting, Miami Beach, Fla.

November 29-December 2—American Medical Association Clinical Meeting, Auditorium and Exposition Hall, Miami Beach, Fla., and the Americana Hotel, Bal Harbour, Fla.

December 4-5—Southern Society for Pediatric Research, Shamrock-Hilton Hotel, Houston, Tex.

December 8-10—Southern Surgical Association, Boca Raton Hotel, Boca Raton, Fla.

National

November 9-21—Postgraduate course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine, Illinois Eye and Ear Infirmary, Chicago.

PRESIDENT'S LETTER

A SMALL SALUTE TO COUNCIL

SOME MONTHS ago when Dr. McDaniel told me that some time during the year he would call on me to fill in for him and take over the President's Page for one issue of the *M.A.G. Journal,* I happily said I would be glad to, and now here it is some three months later and so far no word on paper. But the mail brings reminders from the *Journal* editorial staff that my deadline is next Wednesday, but that if I can have my paper in by yesterday it would suit them just fine; all the while I thought I had another week or so. Not having the facile pen nor the factory of ideas with which the present M.A.G. President and his predecessors are endowed, I find myself with no great thoughts to put forth, no message for the improvement of the existing order. But I thought I would comment on one of the working parts of the M.A.G. that I have been exposed to since becoming Vice President—namely Council.

Ones Own Baliwick

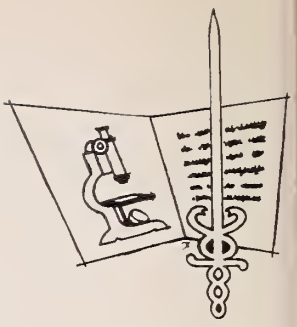
Having been tapped for the job of Vice President I became a member of Council and have had the privilege of sitting in on its meetings for the past 18 months. As a rule, physicians tend to shun all non-medical work they can unless it affects directly their own little bailiwick, and then turn as much of this as possible over to someone else. But in this day and age, as we all know, there are many strings to be pulled, many logs to be rolled, many backs to be scratched, much business to be done for each member of M.A.G. and for the society as a whole, and someone has to do it. Most of this business is handled by Council and it is a good bet that the majority of M.A.G. members do not realize the amount of time, thought, and effort that goes into the running of their organization by this handful of men. Council meets quarterly in various places in the state. The meeting site is sometimes almost a day's trip from home for some; then come the two business meetings of some four hours each, deciding the affairs of the M.A.G., fitting the policies of the county and district societies into the overall picture of the State Society and fitting the piece called M.A.G. into the overall picture puzzle of the A.M.A., all the while spending, as well as carefully guarding, the monies coming into the treasury of the organization.

The Ramifications

Councilors and Vice Councilors are elected by their district or, in the case of the more populous counties, by their County Societies. Many are re-elected and many have had long terms of office. This is good, because it takes time for one to absorb most of the facts needed to do his job and understand the many ramifications of the State organization. The average doctor is too prone to accept the business side of his local society in a laissez-faire sort of fashion, and the same goes double for the state organization but each should be aware of the great amount of business that has to go into keeping the organization together, taking our part when outside influences or powers tend to thwart what we think are our rights and privileges as doctors. This in great part is done by a handful of men forming what is known as Council of the Medical Association of Georgia. So when your councilor gives his report at your next society meeting, listen well, for he is speaking to you of what has been done, is being done and will be done in your behalf, and be thankful unto him.

John Kirk Train, M.D.
First Vice President,
Medical Association of Georgia

CANCER PAGE



CANCER OF THE BREAST

Julian K. Quattlebaum, Sr., M.D., *Savannah*

THE BREAST is the most frequent site of cancer in white women. Recognized for centuries there is still no uniformity of opinion as to management of the disease. The literature on the subject is voluminous and a mass of statistical data has accumulated, much of which would indicate the overall results of treatment for cancer of the breast show a striking uniformity in the survival rate regardless of the method used. If those who have most experience are unable to arrive at definite conclusions as to what is the best method of treatment, what is to be expected of those who see comparatively few cases but on whom the responsibility rests directly? What is a reasonable position to assume in the management of cancer of the breast?

Until Proven Otherwise

First; one should consider every solitary tumor in the breast of a woman in the cancer age as being malignant until proven otherwise. Biopsy should be carried out on every such tumor; the biopsy should be done in a hospital under general anesthesia with adequate preparation for additional surgery if indicated. A competent pathologist experienced in reading frozen sections should be available if possible. The value of this procedure is emphasized in a recent report of 565 biopsies in which 21 per cent of the malignant lesions were found in women on whom the clinical impression was benign.

Most operable tumors of the breast should be treated by the radical Halsted procedure. There is no stastical evidence to justify increasing the morbidity by going above the clavicle or into the chest in search of additional nodes. Postoperative radiation therapy should be given those patients with more than limited axillary nodal involvment and for those in which the lesion is situated centrally or in the medial quadrants of the breast. If the growth is large and unfavorably located in the breast, or doubtfully operable, there is ample evidence to warrant conservative measures such as simple mastectomy and subsequent X-ray treatment. Preoperative radiation will undoubtedly temporarily inactivate the lesion and should be used on those cases in which surgery has been delayed following biopsy and on selected cases that are to be treated, either by simple or radical mastectomy. This theoretically diminishes the likelihood of producing widespread dissemination of the disease by subsequent manipulation.

Concomitant Oophorectomy

Approximately three out of five surgeons prefer concomitant oophorectomy for breast cancer in the premenopausal age. If postponed until mastasases occur, oophorectomy may be successful in giving remissions of an average of ten months duration, which in individual cases may extend over a period of years. Hormone therapy is better reserved until the occurrence of metastasis and may be given in conjunction with local X-ray therapy or alone with little difference in the ultimate survival rate. Cytotoxic drugs may be used prophylactically or in the management of patients with mammary cancer and may make the patient more comfortable and possibly result in objective remission of metastasis. Bilateral adrenalectomy and hypophysectomy should be reserved for the carefully selected individual case with advanced cancer and carcinomatosis, and with an occasional dramatic response. In general the same basic principles apply to the pregnant woman and the lactating breast with individual exceptions.

Statistics are of no value in prognosing the individual case, and results should be evaluated in terms of prolongation of life rather than in cure. Perhaps the philosophy of the surgeon should be changed about this disease, recognizing that cure, as we commonly apply the term, is rarely accomplished, but we can prolong life, relieve suffering and inspire hope.

3710 Waters Avenue

Approved by the Professional Education Committee, Georgia Division, ACS.

CARDIAC TAMPONADE

Luther Fortson, M.D., *Marietta*

It has been shown experimentally that the rapid injection of liquid into the pericardial space is followed by a predictable series of hemodynamic events. The peripheral venous pressure rises as the intrapericardial pressure is increased; and as the venous pressure rises, the systemic arterial pressure falls and the arterial pulse pressure becomes narrower. When the pressure within the pericardial sac reaches approximately 20 mm. Hg., the circulation ceases.

Tamponade Present

Tamponade is said to be present when fluid in the pericardium accumulates in an amount sufficient to cause serious obstruction to flow blood to the ventricles. The amount of pericardial fluid necessary to produce this critical state may vary from 250 ml. when the accumulation is rapid, to over 1000 ml. in a slowly-developing effusion when the pericardium has the opportunity to stretch and adapt to the increasing pressure.

Hemopericardium

By far the most common cause of cardiac tamponade in our community has been hemopericardium due to direct trauma to the chest — notably steering-wheel injury. Prompt recognition and promp pericardial aspiration may save a life in this situation. Other causes are tuberculous or pyogenic pericarditis; metastatic tumor; hemopericardium following myocardial infarction; rheumatic fever; systemic lupus erythematosus; or, very rarely, acute benign non-specific pericarditis.

Symptoms and signs of cardiac tamponade are primarily due to abrupt fall in cardiac output. Dyspnea and orthopnea with distended neck veins and clear lung fields is the characteristic symptom complex; an important clue in diagnosis is the finding of *increased* distention of neck veins with inspiration (Kussmaul sign), rather than the inspiratory fall of venous pressure typically observed in congestive heart failure. The most helpful sign of tamponade is the paradoxic pulse; a fall of systemic blood pressure of more than ten mm. HG, with inspiration is a positive test. Unfortunately, this sign is not specific; paradoxic pulse is seen characteristically in bronchial obstruction, asthmatic or otherwise, and may be seen in severe congestive heart failure with low cardiac output, as in primary myocardial disease. Other physical signs of pericardial effusion, such as absence of apical impulse, disappearance of friction rub, percussible right heart border, muffled heart sounds, diminished cardiac pulsations or consolidation of the left lower lobe of the lung (Ewart's sign) are so inconstant and variable that they are of little value in the recognition of tamponade. Roentgenologic examination may suggest or confirm the presence of pericardial effusion; but the roentgenologic abnormalities depend more on the size of the effusion than on the intrapericardial pressure. Electrocardiographic changes characteristic of pericarditis may be found in about 75 per cent of cases, but these changes are a reflection of associated subpericardial myocardial lesions and not intrapericardial pressure. (An ingenious procedure recently advocated for the detection of pericardial fluid or thickening consists of measuring change in T wave amplitude after the ingestion of a large amount of ice water; absence of T wave change is presumptive evidence of an "insulating" effect.)

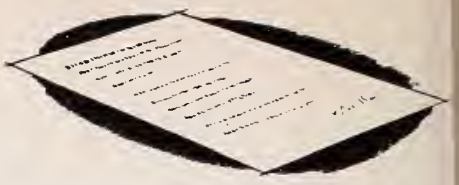
A Clinical Problem

Diagnosis of tamponade, therefore, remains a clinical problem, and pericardial aspiration should be performed promptly if evidence of cardiac compression is observed. The combination of dyspnea, tachycardia, falling blood pressure, paradoxic pulse, and inspiratory engorgement of neck veins demands immediate pericardiocentesis. Rapid reaccumulation of effusion may require surgical intervention and creation of a pleuropericardial window, if repeated aspirations are ineffective.

205 Tower Road

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

ABSTRACTS BY GEORGIA AUTHORS



Foster, Richard S., M.D.; Wade H. Shuford, M.D.; Charles Rieser, M.D.; Elbert P. Tuttle, Jr., M.D.; and Milton J. Deitch, M.D., Grady Memorial Hospital, Atlanta 3, Georgia, "Selective Renal Angiography in Clinical Urology," J. Urol. 90:631-641 (Nov) 63.

At Grady Memorial Hospital selective renal artery catheterization using the percutaneous Seldinger technique was performed on 80 patients with a variety of renal diseases. During the rapid injection of five-ten ccs of 60 per cent methylglucamine diatrizoate, serial films were obtained with an Elemagraphic,, cortical or vascular nephrogram, late nephrogram and venographic phases.

Of the 17 patients with suspected mass lesions, arteriography was valuable in ruling out a renal mass in four cases and in differentiating the nine benign cystic lesions from three hypernephromas and one carcinoma of the renal pelvis.

Of the 37 patients with hypertension, selective arteriography was of value in better delineation of main artery lesions than provided by aortography. Abnormalities of the medium and small distal branches were visualized and thought to be helpful in evaluating the contralateral kidney and downstream disease in the kidney with a main artery obstruction.

Arteriovenous malformations, polycystic kidneys, advanced hydronephrosis and segmental infarctions produced diagnostic angiograms.

No complications were encountered. The advantages of reduced volume of contrast media, adequate filling of very small arteries and selective filling of only renal vessels outweighs the occasional disadvantage of a lengthy procedure or presence of multiple renal arteries.

Wenger, Nanette Kass, M.D.; J. Willis Hurst, M. D.; and V. Nelle Strozier, M.D., Emory University Hospital, Atlanta 22, Georgia, "Electrocardiographic Changes in Pregnancy," Am. J. Cardiol. 13:774-778 (June) 64.

Twenty-four women were studied during the course of an uncomplicated pregnancy; monthly electrocardiograms were recorded beginning in the third month of pregnancy; a postpartum electrocardiogram was obtained during the first week following delivery. These values were compared with those of 16 normal patients studied with eight successive monthly electrocardiograms. It was found that there was (a) a significantly greater veriability during pregnancy than in the non-pregnant state of the QRS and T vectors and of the QRS-T angle; (b) the QRS vectors and the QRS-T angle did not vary significantly during the three periods studied, i.e., the first and second trimesters of pregnancy, the third trimester of pregnancy, and the immediate postpartum period. It was concluded from the study that the significance of change in the electrical axes of the heart during pregnancy must be evaluated cautiously in view of the considerable veriability of the electrocardiogram during a normal pregnancy.

Dixon, J. Kelly, M.D., Atlanta, Georgia, "Refractory Ventricular Tachycardia," South. M. J. 57:717-722 (June) 64.

A case is reported of refractory ventricular tachycardia apparently following a myocardial infarction in a 61-year-old colored male. Conversion was attempted with large doses of intravenous pronestyl, oral quinidine and atabrine as well as supportive measures which included oxygen, digitalization, corticosteriods, and vasopressors. Electric countershock was not available at the time. Conversion to a normal sinus rhythm occurred on the sixth hospital day four hours after 3.2 grams for quindine gluconate were given intravenously over a four hour period with vasopressor support.

Lauderdale, James M., M.D., Martin Army Hospital, Ft. Benning, Georgia, "Transabdominal Decompression of the Breech Hydrocephalus," Obst. & Gynec. 23:938-939 (June) 64.

Two cases of transabdominal decompression of the breech hydrocephalus are presented. Decompression was performed with the use of a 19 gauge needle through the abdominal wall, uterus, and into the cranial vault. Utilizing water-seal suction, a complete decompression of the hydrocephalus was done. The actual decompression occurred only after the patient was completely dilated and the breech on the perineum and under conduction block anesthesia. Usually this problem has been handled by cesarean section, by destructive operations, or by the transvaginal tapping of the aftercoming head after delivery of the shoulders. Those who have performed the latter procedure realize that it is difficult and, in essence, precludes the birth of a live baby because of the time necessary for decompression. This technic is morally acceptable, simple, and technically the easiest solution of this problem.

Greenblatt, Robert B., M.D.; Virendra B. Mahesh, Ph.D.; Lambros C. Rigas, M.D.; and Stanley T. Shapiro, Medical College of Georgia, Augusta, Georgia, "Physiologic and Clinical Aspects of Ovarian Hormones," Arch. Dermat. 89:846-857 (June) 64.

The biosynthesis, physiology and pharmacology of progesterone and estrogen are briefly discussed.

A study on the absorption of estrogens by the skin when applied in the form of a cream containing 10,000 I.U. of estrogens and five mg. progesterone per ounce was carried out on two sisters, aged 14 and 17, and a 35-year-old female with gonadal dysgenesis. It was concluded that the cream produced no significant local effects and the absorption was too minor to produce any systemic effect. More concentrated estrogen-progesterone cream containing 50,000 I.U. of estrogens and 25 mg of progesterone per ounce had significant local effects when applied to the vagina and vulvae of a 59-year-old woman with dyskeratotic lesions of the vulvae.

Roy, Sommnath, MBBS, D.Phil; Robert B Greenblatt, M.D.; and Virendra B. Mahesh Ph.D., D.Phil., Medical College of Georgia, Augusta, Georgia, "Efforts of Clomiphenes and Intraxplenic Ovarian Autotransplantation on the Anovulatory Cystic Ovaries of Rats Having Androgen-Induced Persistent Estrus," Fertility and Sterility. 15:310-316 (May-June) 64.

Clomiphene was administered in graded doses to rats having androgen-induced persistent estrus for 78 days. It failed to produce corpus luteum or luteinization in the ovaries of such rats, although it decreased the weight of the uterus mainly by its antiestrogenic action. On the other hand, intrasplenic autotransplantation of the ovaries of such rats for 60 days produced corpora luteo and intensive luteinization of the follicles. The significance of these findings is discussed.

Parrish, R. A., M.D.; John A. Crook, M.D.; and William H. Moretz, M.D., Talmadge Hospital, Augusta, Georgia, "Coexistent Volvulus of the Transverse Sigmoid and Right Colon," Am. Surgeon 30:313-316 (May) 64.

Many reports of volvulus of the sigmoid and the right colon have appeared in the literature but relatively little has been written concerning volvulus of other areas of the large bowel or concerning the existence of more than one area of involvement in the same patient.

A 20-year-old woman is reported, who had a volvulus of three separate areas of the colon. A volvulus of the transverse colon had been proven at operation six years previously and treated by transverse colostomy.

Over two feet of transverse colon were subsequently resected. Large bowel obstruction recurred and two other separate volvuli were found at operation, one involving the cecum, ascending colon and terminal ileum, the other involving the sigmoid and descending colon. Because of the generalized lack of attachment of colon, successful definitive therapy consisted of subtotal colectomy with primary anastomosis of ileum to rectosigmoid colon. No other report of volvulus occurring in more than two areas of the colon in one patient could be found.

Rinker, J. Robert, M.D., and James H. Sullivan, M.D., Medical College of Georgia, Augusta, Georgia, "Drug Reactions Following Urethral Instillation of Tripelennamine (Pyribenzamine)," J. Urol. 91:433-434 (April) 64.

Since triplelennamine has anesthetic properties and is also antihistaminic.

a two per cent solution of the drug came into use for urethral instillation as a "reaction proof" topical anesthetic. Our overall experience has been good, but two elderly patients exhibited alarming changes—rapid pulse to 140, blood pressure rise from 134 to 240, with disorientation, restlessness, retching, and coma beginning a few minutes after the instillation. Maximum changes occurred in about ten minutes, then gradually abated in the next two hours to the previously normal state.

We believe the changes were due to central stimulation from an overdosage, because the blood pressure rose in contrast to collapse in a true drug reaction. Absorption from the urethra is a variable and uncontrollable factor. Excessive absorption can no doubt take place in an occasional patient.

Ellison, Lois T., M.D.; Duren Daniell, Jr., M.D.; John F. Duke, M.D.; and Robert G. Ellison, M.D., Medical College of Georgia, Augusta, Georgia, "Failure of Intravenous Propylthiouracil to Alter Immediately Body Temperature and Metabolic Requirements," Am. Rev. Dis. 89:687-690 (May) 64.

The use of decreased body temperature in a wide variety of surgical and medical conditions is well known. The production of hypothermia by the usual external or internal methods requires trained personnel and special equipment and is difficult to maintain and control. Reports in the literature suggested that intravenous propylthiouracil might be employed to replace or augment therapeutic hypothermia. Therefore, propylthiouracil was administered intravenously to 11 patients and six dogs to investigate its possible therapeutic value as a method of easily, rapidly, and safely reducing body temperature and metabolic requirements. No alteration in temperature, oxygen consumption, ventilation, or arterial blood gases was observed during three hours after beginning infusion of the drug. It is concluded that propylthiouracil is of no value for this purpose.

Young, W. Cho., M.D., Philadelphia, Pennsylvania, and Pierre M. Galletti, M.D., Ph.D., Department of Phisiology, Emory University, Atlanta 22, Georgia, "Myocardial Responses to the Partial Heart-Lung Bypass: Studies of Actin and Myosin," J. Thoracic & Cardiovas. Surg. 47:628-632 (May) 64.

In order to study the reversibility of alterations in the cardiac contractile protein after the recovery of animals from 24 hour bypass procedures, seven mongrel dogs were sacrificed, four weeks after isovolemic perfusion at flow rates approximating one half of the cardiac output. Purified actin and myosin were extracted from the myocardium. The cardiac actin obtained from the experimental group could not be repolymerized by the addition of KC1 and ATP in the presence of 0.05 tris buffer (pH 7.4), and 0.005 M $MgCl_2$. at 26°C. This actin solution was also unable to activate the myosin adenosine triphosphatase activity (ATPase); however, the myosin ATPase activity was comparable with the control. These changes in the actin molecules, either primary or secondary, might be one of the causes of "perfusion death" after prolonged bypass.

Engler, Harold S., M.D.; Antonio Fernandez, M.D.; Floyd E. Bliven, M.D., and William H. Moretz, M.D., Medical College of Georgia, Augusta, Georgia, "Cancer Arising in Scars of Old Burns and in Chronic Osteomyelitis, Ulcers, and Drainage Sites," Surgery 55:654-664 (May) 64.

In a period of six and one-half years, 20 patients with this type of cancer were treated. Nine of these were associated with old burn scars, five with chronic osteomyelitis, and six with other chronic ulcers and drainage sites.

Biopsies of chronic ulcers and chronically draining tracts, especially those of many years duration and those having recently changed, are urged. Not only the margins of the ulcer, but also the central areas should be biopsied.

Prophylactic surgery should be used freely in these potentially malignant or precancerous lesions since our present knowledge does not permit us to predict the particular instances most likely to develop cancer.

Carcinoma in burn scars and in chronic ulcers should be treated aggressively by radical local excision. Although evidence for the effectiveness of a regional lymph node dissection is lacking, the present feeling is that these nodes should commonly be excised. In most instances of carcinoma arising in chronic osteomyelitis, amputation of the involved extremity is indicated.

Carcinoma arising in chronic drainage sites in the perineal area are most adequately handled by combined abdominoperineal resection.

Anabtawi, Isam N., M.D.; Robert G. Ellison, M.D.; Thomas J. Yeh, M.D., and David P. Hall, M.D., Medical College of Georgia, Augusta, Georgia, "Dissecting Anuerysm of Aorta Associated with Turner's Syndrome," J. Thoracic & Cardiovasc. Surg. 47:750-754 (June) 64.

Gonadal dysgenesis commonly called Turner's Syndrome is usually associated with skeletal, visceral and cardiovascular anomalies. Coarctation of the aorta is the most frequently reported associated cardiovascular anomaly. A case of dissecting aneurysm of the aorta associated with this condition, the second reported case, is presented. The rarity of this complication and the possible endocrine relationship of steroids and arterial wall structure are discussed.

Dickey, Lovick E., M.D., and Walter P. Barnes, Jr., 671 Hemlock Street, Macon, Georgia, "A Salvage Procedure for Certain Fractures of the Radial Head," South. M.J. 57:711-713 (June) 64.

This article describes a new procedure, not previously reported, whereby a small wire is used to repair so-called Type II or cleft fractures of the radial head. When displaced, the accepted treatment has generally been to excise the radial head, and by using this method, the radial head is restored to its original shape. The authors report four cases with accompanying X-rays, and feel that preserving this providentially provided piece of anatomy is certain to be superior to radial head excision.

McDonald, Robert H., Jr., M.D.; Leon I. Goldberg, M.D.; John L. McNay, M.D., and Elbert P. Tuttle, Jr., M.D., 69 Butler Street, S.E., Atlanta, Georgia, "Effects of Dopamine in Man: Augmentation of Sodium Excretion Glomerular Filtration Rate, and Renal Plasma Flow," J. Clin. Investigation 43:1116-1124 (June) 64.

Dopamine, the precursor of norepinephrine, was infused I.V. in nine normal subjects and seven times in six patients with congestive heart failure to increase systolic B.P. 10-20 mmHg. Renal variables were measured in three 20-minute periods before and three during infusion by standard clearance techniques. Duplicate cardiac outputs were measured by dye dilution. Changes in measured variables between control and infusion periods are shown.

Sodium excretion increased in the first collection period in all subjects and persisted during the infusion. No significant change in mean B.P. or renal fraction of total blood flow was observed in the normal subjects. These studies indicate that dopamine differs from other sympathomimetic amines in producing significant and consistent increments in renal blood flow and sodium excretion on acute administration and suggest that it may be useful in treating congestive heart failure.

Hughston, Jack C., M.D., and Mario M. Stone, M.D., Physicians Building, Columbus, Georgia, "Recurring Dislocations of the Patella in Athletes," South. M.J. 57:623-628 (June) 64.

Recurrent subluxation and dislocation of the patella in male athletes is not a too infrequent cause of internal derangement of the knee joint. It is often misinterpreted as being a torn meniscus. The condition is difficult to diagnosis, but often the patella is found to be hypermobile when it is pushed toward the lateral side with the knee flexed 30 degrees, and there is often tenderness along the medial border of the patella. In the article 31 patients presented, each of whom incurred their initial knee difficulty in the process of organized athletics. Correct treatment is necessary for correction of the derangement of the knee joint.

Haynes, C. Doyle, M.D.; James E. Anderson, M.D.; and James C. Thoroughman, M.D., 4158 Peachtree Road, N.E., Atlanta 19, Georgia. "Eosinophilic 'Granuloma' of the Stomach and Small Intestine," Am. Surgeon 30:239-242 (April) 64.

A case of eosinophilic granulomatous infiltrate involving the stomach, duodenum, and jejunum is reported. The etiology of this condition is not clear and operative resection seems to be the safest means of diagnosis and differentiation from malignancy. The lesion of the stomach can present as a polypoid mass or as a flat, sessile infiltrating lesion. The polypoid type may prolapse into the pylorus, producing intermittent obstruction.

Emphasis is placed on the histological differences between this lesion and eosinophilic granuloma involving bone and soft tissue. The diagnosis is usually made by the pathologist, but it should be suspected clinically when there is an associated eosinophilia in the blood smear. The case reported had a six per cent eosinophilia preoperatively and up to 30 per cent postoperatively.

THE ASSOCIATION

DEATHS

JOHN H. PINHOLSTER, 62-year-old Savannah physician, died at his home August 9, 1964, after a long illness.

Dr. Pinholster was a past president of the Georgia Medical Society, a former chief of staff at Memorial Hospital, and a member of the Medical Association of Georgia and the American College of Surgeons.

A native of Liberty County, he was a graduate of Mercer University and the University of Georgia medical school. He was a past president of the Exchange Club of Savannah and served as a Lieutenant Commander in World War II with the U.S. Navy.

He is survived by his wife, Mrs. Kathryn White Pinholster; two sons, John H. Pinholster, Jr., of Savannah and Neil W. Pinholster of Atlanta; a sister, Mrs. A. R. Miller of Clearwater, Fla.; three grandchildren and a number of nieces and nephews.

SOCIETIES

EIGHTH DISTRICT MEDICAL SOCETY met August 21-22 at the King & Prince Hotel, St. Simons Island. Saturday's program consisted of "The Doctor and Politics." Speaking on the topic were Joseph B. Mercer, M.D. of Brunswick, and Dr. Mercer chose as his topic, "The Doctor and Local Political Activity." Dr. Mercer is currently Mayor of Brunswick. "National Political Affairs and The Doctor," was discussed by the Honorable J. Russell Tuten, Member of Congress from the Eighth District of Georgia. Winding up the meeting was Milford B. Hatcher, M.D., of Macon, Past President of the Medical Association of Georgia and Member, Executive Board, American Medical Political Action Committee. A question and answer panel followed. Social hours and dinner and dancing were held both Friday and Saturday nights.

PERSONALS

First District

R. G. BROWN, Swainsboro, has returned to his local practice of medicine following successful eye surgery. It was the second operation undergone in recent months by the physician.

Fifth District

JOHN D. THOMPSON, Atlanta, has been appointed Consultant to the National Institute of Child Health and Human Development.

Atlanta physician, E. L. GRAYDON, has been elected Vice President of the Georgia Society of Clinical Hypnosis. Other officers of the society include two dentists and a clinical psychologist.

SIDNEY OLANSKY and MARIAN OLANSKY attended the meetings of the American Medical Association, and the Society for Investigative Dermatology, San Francisco, and the American Dermatological Association, Maui, Hawaii, in the period between June 18 and July 3, 1964. Dr. Sidney Olansky discussed a paper on the "Use of Polnaftate in the Treatment of Fungus Infections" and presented a paper at the American Dermatological Association on the subject of "Persistent Treponemes in Patients Treated for Late Syphilis With Penicillin."

Eighth District

C. G. JORDAN in August opened his office in St. Mary's for the practice of medicine and surgery. Dr. Jordan had previously done general practice in Eatonton, Georgia, after which he took a surgical postgraduate course at Charity Hospital, New Orleans, and served as Chief of Surgery at Reidsville State Prison for six months. He also served five years in the Army with the 26th General Hospital.

Ninth District

JESSE CARLTON DOVER, 88, of Clayton is Georgia's oldest member of the National Rehabilitation Association, and J. COLQUITT LOGAN, 84, of Plains, is Georgia's oldest full time member of NRA. Both men were recently honored by the Association along with THOMAS P. GOODWYN, Atlanta, who was presented a Special Award of Merit at the 17th Annual Conference held at the Biltmore Hotel, Atlanta.

Fiften Hall County physicians were recently honored by the Georgia Heart Association.

GEORGE D. GOWDER, JANET K. JOHNSON, RAY LOWELL PEACOCK, JR., FREDERICK BLOODWORTH, W. RALEIGH GARNER, BEN P. GILBERT, HENRY S. JENNINGS, JR., A. CLEON JOHNSON, JR., HARTWELL JOINER, HARVEY M. NEWMAN, SAMUEL O. POOLE, MARTIN H. SMITH, W. D. STRIBLING, H. E. VALENTINE, JR., and C. J. WALKER, JR., were recipients of awards in recognition of professional services freely given through the Gainesville Heart Clinic.

Drs. Gowder, Janet K. Johnson and Peacock received a certificate for their services from one to five years. The other physicians received bronze meritorius service medallions for services from five to ten years.

Representing the Georgia Heart Association in presenting the awards was DR. HUDDIE L. CHENEY of Thomasville.

HENRY S. JENNINGS, JR., chief of the Gainesville Heart Clinic, was host to the group and Dr. Cheney, Chairman of the Heart Association's Clinics Committee, presided at the meeting.

1965 Annual Session

May 2-4, 1965—Augusta, Georgia

Last Call for Scientific Papers

All titles must be submitted to the respective program chairmen listed below before November 1, 1964

ANESTHESIOLOGY
Zachariah W. Gramling, M.D.
Talmadge Memorial Hospital
Augusta

CHEST
David P. Hall, M.D.
Medical College of Georgia
Augusta

DERMATOLOGY
C. Conrad Smith, M.D.
1349 Druid Park Avenue
Augusta

DIABETES
Alex T. Murphy, M.D.
1134 Druid Park Avenue
Augusta

GENERAL PRACTICE
William A. Fuller, M.D.
1403 Gwinnett Street
Augusta

MEDICINE
Harry T. Harper, Jr., M.D.
1467 Harper Street
Augusta

OBSTETRICS AND GYNECOLOGY
C. I. Bryans, Jr., M.D.
Talmadge Memorial Hospital
Augusta

OPHTHALMOLOGY and OTOLARYNGOLOGY
John R. Fair, M.D.
Medical College of Georgia
Augusta

ORTHOPEDICS
Charles Freeman, M.D.
1136 Druid Park Avenue
Augusta

PATHOLOGY
Menard Ihnen, M.D.
Laboratory, University Hospital
Augusta

PEDIATRICS
A. Joe Green, M.D.
1727 Central Avenue
Augusta

PSYCHIATRY
Julius T. Johnson, M.D.
1445 Harper Street
Augusta

PUBLIC HEALTH
Abe J. Davis, M.D.
3039 Pine Needle Road
Augusta

RADIOLOGY
Stephen W. Brown, M.D.
2922 Bransford Road
Augusta

SURGERY
Harry D. Pinson, M.D.
1467 Harper Street
Augusta

UROLOGY
J. Robert Rinker, M.D.
Medical College of Georgia
Augusta

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS TO CONVENE IN ATLANTA IN NOVEMBER FOR POST GRADUATE COURSE IN TREATMENT OF INJURIES

The Committee on Injuries of the American Academy of Orthopaedic Surgeons has announced a Comprehensive Course in the Treatment of Injuries to be held in Atlanta, November 2-5, 1964, at the Riviera Motel. The program is under the direction of Wood W. Lovell, M.D. of Atlanta.

More than 20 outstanding guest speakers from the U.S. will highlight the four-day meeting. The registration fee is $75 and further information concerning reservations, accommodations, etc. may be obtained by writing to Wood W. Lovell, M.D., 340 Blvd., N.E., Atlanta, Georgia 30312.

President to Speak

On *Monday, November 2,* Registration will be held at the motel at 8:00 a.m. Dr. Lovell will open the entire program with announcements to be followed by a welcome from William J. Bickel, M.D., Rochester, Minn., President of the American Academy of Orthopaedic Surgeons. The program will then proceed with a paper by Jack Hughston, M.D., Columbus, Ga., on "The Acutely Injured Knee." The three remaining guest speakers will be Sam W. Banks, M.D., Chicago, speaking on "Fractures of the Os Calcis;" Rocco A. Calandruccio, M.D., Memphis, Tenn. — "Fractures of the Neck of the Femur;" and "Acute Head Injuries," presented by Robert A. Sears, M.D., Atlanta. A coffee break will be held during the morning session, and a luncheon will be served at the motel after the morning session's adjournment.

Monday Afternoon's Session will be opened by Fred C. Reynolds, M.D. of St. Louis. Dr. Reynolds' topic will be "Management of Open Fractures." Following him will be Robert P. Kelly, M.D., Atlanta, "Fractures of the Dorsal-Lumbar Spine;" Rocco A. Calandruccio, M.D., Memphis, who will present his second paper of the day, "Bone Grafts in the Treatment of Fractures;" and Dr. Reynolds again, speaking on "Disc Lesions of the Lumbar Spine."

Tuesday, November 3, will open with an audio-visual presentation at 8:00 a.m. to be followed at 8:30 by Dr. Bickel, President of the Academy speaking on "Major Tendon Disruptions Other Than the Hand and Foot." Harry D. Morris, M.D., Minneapolis, will speak on "Fractures of the Pelvis;" R. Warner Wood, Jr., M.D., Atlanta, "Fractures and Dislocations of the Foot;" Clinton L. Compere, M.D., Chicago, "Modern Trends in Amputation and Prosthetics;" and Joseph H. Dimon, M.D., III, Atlanta, "Intertrochanteric Fractures of the Femur." The morning's meeting will then be adjourned for lunch.

Tuesday, p.m., November 3, will include on its program J. Willis Hurst, M.D., Atlanta, presenting a paper on "Cardiac Contusions;" William A. Hopkins, M.D., Atlanta, "Crash Injuries of the Chest;" Chalmers R. Carr, M.D., Charlotte, N.C., "Fractures of the Forearm in the Adult;" and John J. Hinchey, M.D. of San Antonio, Tex. speaking on "Prosthetic Replacement for Injuries of the Hip." That evening at 6:30 p.m. a reception for the chairmen and their wives will be held at the motel.

Wednesday, November 4's program will include Frank H. Stelling, III, M.D., Durham, N.C., "Fractures of the Elbow in Children;" Lt. Col. John A. Moncreif, M.C., Ft. Sam Houston, Tex., "Treatment of Burns;" Richard E. King, M.D., Atlanta, "Fractures of the Wrist;" F. James Funk, M.D., Atlanta, "Fractures of the Femoral Shaft;" J. Hiram Kite, M.D., Atlanta, "Injuries of the Hip in Children;" Walter A. Hoyt, Jr., M.D., Akron, Ohio, "Fractures and Dislocations of the Ankle;" Daniel C. Riordan, M.D., New Orleans, "Acute Injuries of the Hand;" Loui G. Bayne, M.D., Atlanta, "Fractures of the Hand;" J. Leonard Goldner, M.D., Durham, N.C., "Injuries of the Cervical Spine;" James W. Harkess, M.D., Augusta, "Complications of Plaster and Traction in the Treatment of Fractures;" and Lt. Col. Moncrief presenting his second paper, "Shock."

Conclusion On Thursday

The last day of the course, *Thursday, November 5,* will be opened by William H. Moretz, M.D., Augusta, who will speak on "Peripheral Vascular Injuries in Trauma." A panel on "Abdominal Injuries" will follow, moderated by J. D. Martin, Jr., M.D., Atlanta, and composed of Dr. Moretz, and William G. Whitaker, M.D., and J. Richard Amerson, M.D., both of Atlanta. Following the panel discussion will be the remaining speakers for the program — Robert E. Cells, M.D., Atlanta, "Fractures of the Tibial Shaft;" Sterling J. Ritchey, M.D., Atlanta, "Fractures and Dislocations of the Shoulder;" Samuel S. Ambrose, M.D., Atlanta, "Injuries to the Genito-Urinary Tract;" and Floyd E. Bliven, M.D., Augusta, "Principles of Rehabilitation."

NEW MEMBERS OF THE MEDICAL ASSOCIATION OF GEORGIA

NAME	*ADDRESS*
Boyd, Ronald J. Active—Tift	106 W. 4th Street Tifton, Georgia
Carico, James M. Active—Thomas-Brooks	John D. Archbold Hospital Thomasville, Georgia
Hitt, William Active—Wayne	235 S. Macon Street Jesup, Georgia
Newsome, Neal H. Active—Fulton	2045 Peachtree Road, N.E. Atlanta, Georgia 30309
Miller, Frank R. Active—Thomas-Brooks	413 Gordon Avenue Thomasville, Georgia
Perling, David S. Active—Fulton	5444 Peachtree Ind. Blvd. Chamblee, Georgia
Pruett, James E. Active—Fulton	490 Peachtree St., N.E. Atlanta, Georgia 30308
Sullivan, James H. Active—Muscogee	1430 3rd. Avenue Columbus, Georgia
Symbas, Panagiotis N. Active—Fulton	490 Peachtree St., N.E. Atlanta, Georgia 30308
Van Houten, John, Jr. Active—Spalding	Hampton, Georgia
Whitney, Douglass G. Active—Fulton	340 Boulevard, N.E. Atlanta, Georgia 30312

THREE DISTINGUISHED SPEAKERS TO DELIVER MID-DAY LECTURES AT AMA CLINICAL CONVENTION

Three prominent men of medicine will deliver mid-day lectures during the AMA Clinical Convention.

Edward R. Annis, M.D., Miami, immediate past president of the AMA, will speak on "The Physician as a Diplomat" on Monday, November 30.

Goza de Takats, M.D., Chicago, an eminent vascular surgeon, will discuss "Diabetic Vascular Disease" on the following day. Dr. de Takats, born in Budapest, Hungary, had a long and distinguished career as clinical professor of surgery at the University of Illinois School of Medicine.

Space Medicine

The third lecture, "Medical Aspects of Space Flight," will be presented Wednesday by Col. Andres Ingver Karstens, M.D., an authority on space medicine, now serving with the Air Force Space Systems Division, Los Angeles. Col. Karstens was commanding officer of the Arctic Aeromedical Laboratory, Ladd Air Force Base in Alaska from 1950 to 1955, served as director of research, aviation medicine, Randolph Air Force Base, Texas, from 1956 to 1958, and later served at Wright-Patterson Air Force Base, Dayton, Ohio, and Brooks Air Force Base, San Antonio, Texas.

Lecture Highlight

Another highlight of the scientific program will be a series of eight lectures on vascular occlusive diseases on the final day of the meeting. Phlebitis, pulmonary embolism, carotid atherosclerosis, and peripheral arterial disease will be reviewed by J. Alex Haller, Jr., M.D., associate professor of surgery, The Johns Hopkins Hospital, Baltimore; David C. Sabiston, Jr., M.D., also of the Johns Hopkins; Robert R. Linton, M.D., Brookline, Mass.; Richard T. Shackelford, M.D., Baltimore; E. Stanley Crawford, M.D., Baylor University College of Medicine, Texas Medical Center, Houston; Alexander Blain, III, M.D., Detroit; John L. Ochsner, M.D., New Orleans; and W. Sterling Edwards, M.D., Medical College of Alabama, Birmingham.

Emphysema

Emphysema, fast becoming a leading cause of death and disability in older men, will be discussed in two lectures followed by a symposium. Participants will be Herbert C. Sweet, M.D., St. Louis University School of Medicine, St. Louis; Harold A. Lyons, M.D., professor of Medicine, University of State of New York, Downstate Medical Center, Brooklyn, N.Y.; and Asher Marks, M.D., associate professor of medicine, University of Miami School of Medicine, Miami.

Similar sessions will be held on cardiac arrhythmias with Edward S. Orgain, M.D., professor of medicine, Duke University Medical Center, Durham, N.C.; Stuart W. Rosner, M.D., U.S. Public Health Service, Washington, D.C., and Louis Lemberg, M.D., University of Miami School of Medicine, Miami, participating; and on hypertension with William H. Hulet, M.D., associate professor of medicine and physiology, University of Miami School of Medicine, Coral Gables; John H. Moyer, M.D., professor, department of medicine, Hahnemann Medical College and Hospital, Philadelphia, and Hugh R. Gilmore, III, M.D., associate professor of medicine, University of Miami School of Medicine, Miami, as participants.

Remaining Features

Other sessions will be devoted to immunization; venereal disease; aviation medicine; peptic ulcer, pancreatitis, and abdominal pain; depressive states; breast cancer; gastrointestinal diseases; autoimmunity; pyelonephritis; radioisotopes in diagnosis; rehabilitation; and iatrogenic diseases.

AMA TO SPONSOR FIRST NATIONAL CONFERENCE ON AREAWIDE HEALTH FACILITIES PLANNING

The First National Conference on Areawide Health Facilities Planning will be held in Bal Harbour, Florida, November 28-29, the American Medical Association has announced.

Sponsored by AMA's Council on Medical Service, the day and one-half meeting will be at the Americana Hotel and will immediately precede AMA's 18th clinical convention.

According to Willard A. Wright, M.D., Williston, N.D., Chairman of the Conference, the meeting is being held to gain insight and understanding into the growing need for health facilities planning.

Conference participants will explore the concept of health facilities planning from four directions. These include:

—The national program of areawide planning with a review of federal, state, regional, and local community interest, participation, and legislation.

—A look at the need for areawide planning as seen by medicine, hospitals, planning agencies, insurance, and the consumer.

—An examination of voluntary and governmental approaches to the subject.

—A discussion of the areawide planning process, measurement of needs, and community self-determination.

For additional information write: Department of Hospitals and Medical Facilities, American Medical Association, 535 North Dearborn, Chicago, Illinois 60610.

PHARMACEUTICAL MANUFACTURERS ASSOCIATION CONCLUDES TESTS ON PLASTICS USED FOR HUMAN MEDICAL INJECTIONS

The U. S. prescription drug industry has concluded successfully a three-year research project to define standards for plastics which contain medical injections for human use.

The Pharmaceutical Manufacturers Association (PMA) has announced that the drug firms which conducted the cooperative research in their own laboratories spent an estimated $250,000 on the study. All drug manufacturers will benefit from the research whether or not they belong to PMA.

In the past, plastics used as containers for injections have met performance requirements of the general law which required that they have no effect on the contents.

These requirements, however, had never been defined.

The study provides tests by which manufacturers can come much closer to defining the requirements; making certain that the containers do not harm the contents.

It will now be up to the U.S. Pharmacopeia (USP) and the National Formulary, which are considering the findings, to decide whether the definitions should be incorporated into their publications which are issued about every five years with occasional supplements.

Representatives from both USP and the National Formulary collaborated with representatives of PMA member firms while the plastic study was underway. The Food and Drug Administration also worked with the firms.

FDA has authority to enforce any official requirements which result from the research. The requirements become official only after publication by USP and the National Formulary. Both are quasi-governmental bodies composed of expert private citizens with authority to publish specifications that are binding on the food and drug industry.

USP for perhaps 25 years has published requirements for glass containers used by the drug industry. PMA has formed a new committee to carry out similar research for rubber products which come in contact with medications.

Although plastics are used by the drug industry as containers for many items, the research was concerned only with those containers used for holding injections. During the committee study, 22 plastics of six basic chemical compound systems were subjected to more than 20,000 individual biological and physico-chemical tests.

Six PMA member firms conducted the plastic study under the chairmanship of Elmer Kreuger of Abbott Laboratories in Chicago. Dr. Karl Bambach, Senior Vice President of PMA, participated, along with Dr. Edward Feldmann, Director of Revisions for the National Formulary, and Dr. Lloyd Miller, Director of Revisions for the USP.

SMITH, KLINE & FRENCH AGAIN TO AWARD FOREIGN FELLOWSHIPS

The Association of American Medical Colleges has announced that Smith Kline & French Foreign Fellowships will be awarded by the Association again next year, for the sixth successive year. Applications will be accepted from medical students in U.S. schools for grants which will enable them to broaden their medical knowledge by serving in remote medical stations in underdeveloped areas of Africa, Asia, Latin America, and Oceania, for a period of at least ten weeks.

Fellowship grants are available to students who have completed their junior year, with eligibility continuing through their senior year. Senior students must plan on carrying out their program before starting internship.

Descriptive brochures and application forms for the 1965 program have been mailed to all medical school deans. The closing date for submitting application is December 31, 1964.

During the past five years, 152 students have been awarded grants from funds provided by the Smith Kline & French Laboratories.

A Fellowship grant covers travel costs and living expenses at the site of the student's foreign sponsor. The amount of each award is determined by individual expense and need, varying with different programs and locations.

Expenses of a professionally trained spouse will be included in a grant if this seems desirable in terms of the objectives of the program. In such instances, husband and wife work together as a medical team.

The Selection Committee of the AAMC, comprised of six American medical educators, anticipates that in 1965 approximately 30 more students will be provided the opportunity to gain firsthand experiences with unusual clinical and preventive health problems in societies and cultures different from their own.

The Committee is under the chairmanship of Robert A. Moore, M.D., president of the State University of New York, Downstate Medical Center, Brooklyn. Other members of the Committee are: Carroll L. Birch, M.D., Professor of Medicine Emerita, University of Illinois College of Medicine; Mark R. Everett, Ph.D., Dean, University of Oklahoma School of Medicine; Robert G. Page, M.D., Associate Professor of Medicine and Assistant Dean, University of Chicago School of Medicine; William A. Sodeman, M.D., Dean and Vice President for Medical Affairs, Jefferson Medical College of Philadelphia; and, Richard H. Young, M.D., Dean. Northwestern University Medical School, Chicago.

Applications will be processed in early February, 1965, and award winners will be announced by March 1.

Students should obtain instructions and application forms from their deans.

For additional information, write to the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Illinois.

MEDICAL ASSOC. . . .

JOURNAL OF THE MEDICAL ASSOCIATION Georgia NOVEMBER/1964

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EARLIEST QUANTITATIVE RECORD OF HUMAN PRESSURE PULSE
(January 30, 1935)

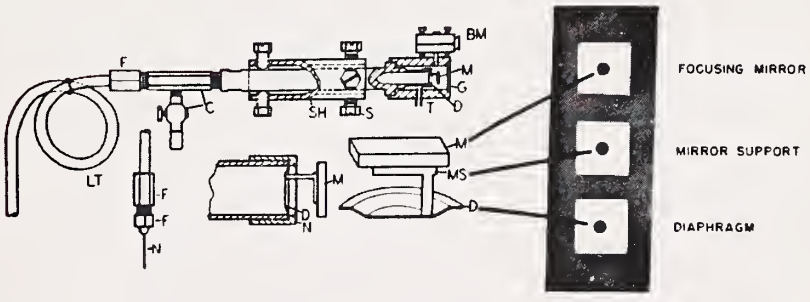
by W. F. Hamilton, H. T. Harper, Jr. and R. A. Woodbury

Recorded from the femoral artery of "Mr. Hughes" Systolic pressure as measured from the manometer calibration is 172 mm Hg and the diastolic 94. Absence of catacrotic waves is not instrumental as witnessed by the rapid upstroke. This anomaly is occasionally seen and has been said to indicate a roughened aortic lining from atherosclerosis.

The manometer with which the record was made is described in the references and diagramed below.

Hamilton, W. F., Brewer, George and Brotman, Irving: Pressure pulse contours in the intact animal: I. Analytical description of a new high frequency Hypodermic Manometer with illustrative curves of simultaneous arterial and intracardiac pressures. Am. J. Physiol., 107: 427, 1934. Hamilton, W. F., Woodbury, R. A. and Harper, H. T., Jr.: Physiologic relationships between Intrathoracic, Intraspinal and Arterial Pressures. J. A. M. A. 107: 853, 1936.

A SIMPLE OPTICAL MANOMETER WITH AN EFFICIENT HYDRAULIC SYSTEM



The manometer is used by thrusting the needle (N) into the part where pressure is to be measured (artery, heart, vein, cerebrospinal canal). The needle is connected by a rigid, flexible leaden tube (LT) to the manometer by a bubble free column of citrate which caused the diaphragm (D) to bulge in response to pressure changes and to move the focusing mirror (M) in proportion to the pressure. The manometer is mounted in a firmly clamped shell (SH) which carries adjusting set screws (S).

Otto Frank in 1909 showed that the quickness with which a manometer can be expected to respond is directly proportional to its volume elasticity coefficient ($E = \frac{\Delta P}{\Delta V}$) and inversely proportional to the effective mass of the fluid contained ($M = \frac{L}{a}$).

Frank's equation is $\frac{1}{n} = \pi\sqrt{\frac{M}{E}}$ where n is the number of free vibrations per second characteristic of the manometer. The larger this number the quicker the manometer's response. E relates to the volume of fluid which enters the manometer per unit pressure change and M to the inertial characteristic of the fluid motion entering the manometer which is greater in long narrow tubes.

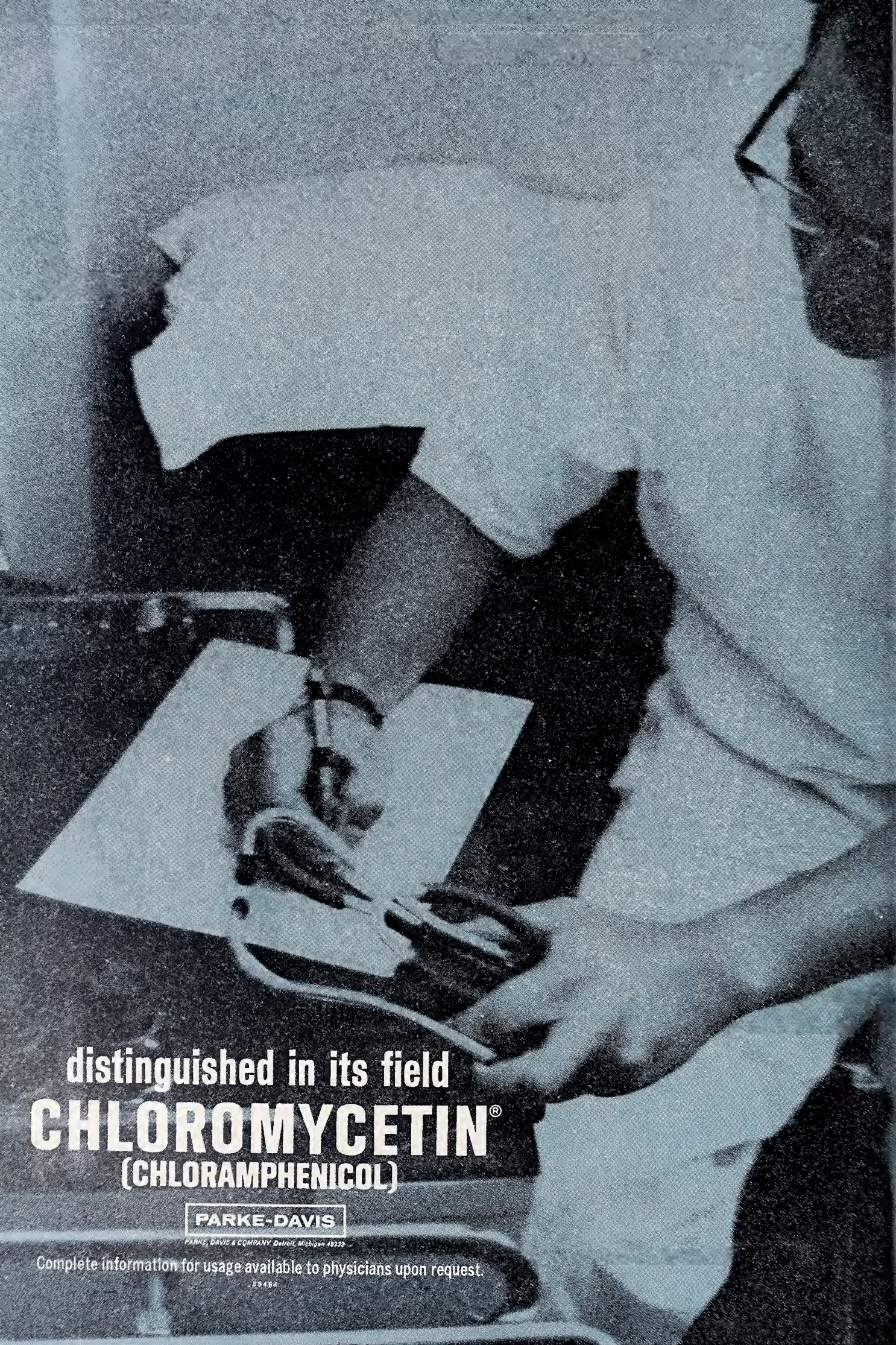
Earlier manometrists gained frequency by reducing M and making the manometer as short and wide as possible. This made them hard to use. The manometer diagrammed above was designed to increase E and allow M to be several hundred fold as great as was the convention. This added to the convenience and flexibility of the use of the manometer.

E was reduced as far as possible by using a very small and stiff diaphragm to move the mirror.

In addition the usefulness of the manometer was increased by simplifying and bettering the optical system so that the optical lever could be increased in length from 0.5 m to 2 or even 4 m with satisfactory recording. This allowed the use of a stiffer membrane than could have been used with the then conventional optical lever of 0.5 m.

FIRST RECORDING OF DIRECT ARTERIAL PRESSURE MEASUREMENTS IN MAN.

See page 353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Plaque presented to Georgia Heart Association at their recent meeting in Augusta. Cover photograph by Joe Jackson.

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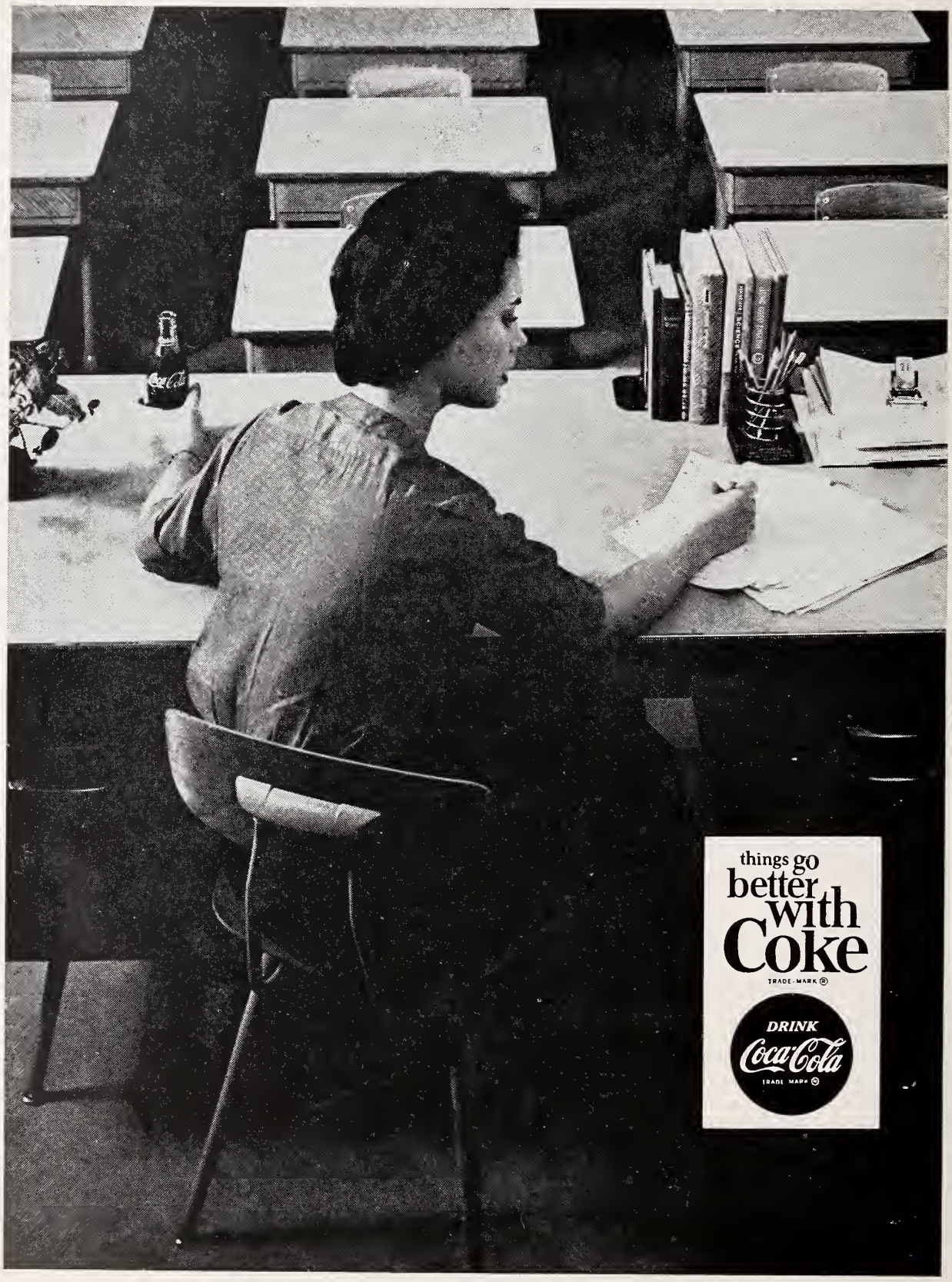

Whether you're a teacher correcting exams. A student cramming for them. A housewife cleaning up after the kids. Or a businessman working late at night. Whoever you are, things go better when you pause and refresh with ice-cold Coca-Cola.

JOURNAL OF THE MEDICAL ASSOCIATION Georgia

NEW THOUGHTS ABOUT AN OLD DISEASE—DIABETES MELLITUS

Leo P. Krall, M.D., *Boston, Massachusetts*

■ ***This disease today is an increasing cause of morbidity as well as mortality.***

THERE HAS BEEN a revolution in the field of metabolic diseases and especially with diabetes mellitus. This has been taking place over a ten-year period. The impact of the changes is not as dramatic as the discovery of insulin in 1921; nevertheless, the changes of the last ten years have been far-reaching, for while the development of insulin taught us how to keep the diabetic alive, we still have gaps in our knowledge and consequently we find that we often are keeping diabetics alive in order that they may suffer the complications of premature aging. For a period of time after the development of insulin the thinking of many clinicians and investigators turned to more dramatic fields and many assumed that the diabetes problem was solved. Yet it is apparent that we are using a replacement therapy which is a long protein complex of 51 amino acids from a foreign species and injecting it by needle, attempting to estimate the patient's activity, diet, metabolism, incipient infection, stresses, etc., for 24 hours in advance. If the patient is well regulated, we are astute physicians. If the patient does poorly, indubitably he or she is cheating. The fact is that with severe or unstable diabetes and certainly in the juvenile form, the tools that we have at hand today, while lifesaving, are not good enough.

Recent Findings

In 1955 Franke and Fuchs described carbutamide, then known as BZ55. This was the original sulfonylurea compound which lowered blood sugar levels by stimulating the release or increasing the production of insulin from the pancreas. While its success in this country was limited by the apparent high rate of liver toxicity, it was soon followed by more successful oral agents including tolbutamide (Orinase), chlorpropamide (Diabinese), acetohexamide (Dymelor) and the biguanide, phenformin (DBI and DBI-TD). These are not the final therapeutic answers, since they can be used only in milder (i.e., shorter-duration and older-onset) diabetics, but they provided more tools for therapy. In this period Sanger in England described the amino acid sequence and the proteins and chemical structure of beef insulin. A year or so later Yalow and Berson published their investigations on methods of insulin measurement and the binding of insulin in the blood. In the last year the synthesizing of insulin in several forms and the recent recognition that insulin acts in the fat as well as carbohydrate metabolism have added successive building stones in the structure of our knowledge about diabetes and it is almost certain that within another decade more complete knowledge will further improve our understanding and treatment.

Diabetes Today

Diabetes today is an increasing cause of morbidity as well as mortality. As the population of the United States soars toward the 200,000,000 mark, it is certain that some 4,000,000 or more will have this condition. A recent increase of the population by 2,000,000 alone insures that 80,000 more diabetics may be found. Forty thousand of these will be obvious diabetics; the other 40,000 will be incipient diabetics awaiting discovery. The cost for one year of medication for 80,000 new diabetics would be some $7,300,000 for an average dose of oral hypoglycemic medication or $3,000,000 if they were treated with an average of 40 units of insulin daily. The cost of today's diabetes, however, cannot be measured in money alone nor even by the death

From the Joslin Clinic and the New England Deaconess Hospital, Boston, Massachusetts.

Presented at the 110th Annual Session of the Medical Association of Georgia, May 4, 1964, Macon, Georgia.

rate. The greatest problem is that of morbidity, incapacitation and the increased numbers who will depend on others for assistance and even the essentials of life. Diabetes is probably the third leading cause of blindness in the United States today. Many diabetics are and will continue to lose limbs. Many will have crippling nephropathy and nearly all will be more susceptible to infections of all types. The cost of their hospitalization and medical care is staggering.

A Look Backward

In Thornton Wilder's *The Bridge of San Luis Rey* the story is told of a priest who was present near a chasm in a mountainous South American country when a bridge broke, hurtling people to their doom. He tried to determine why those people happened to be there at that time. In our society this is a function of biostatistics as well as other research. Sometimes it is necessary to look backward in order to move forward. While nearly everyone can find diabetes when it has the classical findings of polyuria, polydipsia, polyphagia, weight loss, exhaustion and accompanying infection, present concepts indicate that treatment at this stage, while important, is "too little and too late." The truth of the matter is that the conditions underlying diabetes probably start at birth. It is generally accepted that the condition is transmitted as a recessive characteristic in classic heredity patterns. While all children of diabetics will not necessarily become diabetic, statistically their chances of such are much greater. Those who will become diabetic are probably inheritors of a milieu which, when affected by the stresses of life, obesity, infection, and even the problem of aging, will eventually break down and become obvious diabetes mellitus. Diabetes mellitus is not a spontaneous occurrence any more than hypertension is a condition which suddenly occurs one morning after completely normal blood pressure levels. Most cases of hypertension have long been preceded by various physiologic stigmata and even intermittent elevations of blood pressure. The man who dies of a myocardial infarction has sometimes had angina and other cardiac symptoms and most certainly has had a gradual decreasing of the coronary vessels' calibre over a period of many years. Likewise the diabetic has at the time of his diagnosis merely become obvious for the first time.

Subclinical Diabetes

While many diabetics are not found until their symptoms are too severe to ignore, sometimes when people have physical examinations by their family physicians, apply for insurance, are examined prior to employment or are rejected by the army, it is found that their blood sugar levels have long since surpassed the accepted diagnostic standards. Yet because they were symptom-free, they had no complaint to take to their physicians who, since there were no presenting symptoms, might not have tested the blood and urine for glucose. This could be termed "subliminal diabetes" since the condition is beneath the conscious level of the patient and the physician. Nevertheless, these are diabetics and many of these people already will be found to have certain pathologic changes.

The Abnormal Glucose Reactor

If the diagnostic standard is set at a given hyperglycemic level, the future diabetic will be found to have an abnormal glucose tolerance which might not reach the diagnostic level but nevertheless is abnormal. Rachmiel Levine has spoken of this group as "diabetes premellitus." The pancreatic reserve is usually a tremendous one, very comparable with cardiac reserve, kidney reserve or liver reserve. In 3,516 patients tested postprandially for blood sugar levels in the Oxford, Massachusetts, diabetes study of 1946-47,[1] only a very small percentage were found to have Folin Wu blood sugar levels one to two hours postprandially as high as 140 mg. per cent, while the diagnostic level was 170 mg. per cent. This group,[2] abnormal glucose reactors but not diabetic, developed diabetes ten times more frequently than their normal (control) counterparts in the population as chosen by age, sex and weight. They had no symptoms and were not diabetic but were the prime candidates for diabetes.

Prediabetes

As shown by Camerini and others,[3] the true "prediabetic" is the person who is either one-half of a set of identical twins, the other twin of which has already developed diabetes, or the child of two diabetic parents. Theoretically 100 per cent of such persons should have diabetes if they live long enough. This group had normal glucose tolerance, cortisone provocative glucose tolerance and intravenous tolbutamide tests. Yet electron-microscopic biopsy studies showed changes such as thickening of the basement membrane of kidney vessels and increased density of the collagen and elastic tissues in the ear lobe, while the glucose tolerance was in no way affected. This group lacked even the mild glucose tolerance deviations of the previous group. The biopsy changes, while not specific for diabetes, were not present in control studies. If these studies are confirmed, there is reason to believe that in the "normal" phase before diabetes becomes obvious, changes may have taken place insidiously

and indicate not that treatment of the diabetic is futile *per se* but rather that we have been finding the diabetic too late and treating him at much too leisurely a pace. The answer may lie not in therapeutic defeatism but rather in seeking measures to stem the tide far earlier and more effectively.

A Look Forward

In 1921 Elliott P. Joslin told the story of his own home town by stating: "In a country town in New England . . . on a peaceful, elm-lined main street there once stood three houses side by side, as commodious and attractive as any in the village. In these three houses lived in succession four women and three men . . . heads of families . . . and of this number all but one have subsequently succumbed to diabetes . . . Although six of the seven people dwelling in these adjoining houses died from a single complaint, no one spoke of an epidemic. Contrast the activities of the Boards of Health if these deaths had occurred from scarlet fever, typhoid fever, or tuberculosis. Consider the measures which would have been adopted to discover the source of the outbreak and to prevent a recurrence. Because the disease was diabetes and because the deaths occurred over a considerable interval of time, the fatalities passed unnoticed."[4] This was one of the first concepts of a chronic disease as a public health problem and in that very same town of Oxford in 1947, 1.7 per cent of the 70.2 per cent of the town of 4,983 who were checked with history, urinalyses and postprandial blood sugars were found to have diabetes. Still these figures may be conservative because most of the nearly 30 per cent not studied were in the older age groups who either could not be reached or did not take part in the original survey.

Who Gets Diabetes?

What are the influences that bring diabetes into the open? It is apparent that if heredity loads the cannon, there are many factors that trigger the firing of the cannon. Obesity is one of these; stresses such as pregnancy and infection and even the process of aging are other factors in the development of diabetes added when people have the necessary hereditary background. It is estimated that over 40 per cent carry a genetic tendency and this number will probably increase. At the present time too few of us can be sure of our own ancestry, for as Oliver Wendell Holmes once said, "Heredity is an omnibus in which all of our ancestors ride. Every once in a while one of them sticks his head out the window and embarrasses us."

It is apparent that simple recognition of the factors that might have an effect in the etiology of diabetes is not enough to prevent the condition. The most obvious means of preventing the spread of diabetes would be to discourage marriage between those who have diabetes in their ancestries but beyond the general acquaintance of those who have diabetes in their families with these facts, this will never be practical because love and science are not always compatible. When there is known diabetes in the family, steps can be taken at the present time to find diabetes as early as possible and the day may come when diagnostic tests will have greater sensitivity and may help choose the prediabetic with specificity. Studies attempting to evaluate the usefulness of oral hypoglycemic agents in these people before their glucose tolerance is found to be abnormal are now in progress. Overweight is to be avoided in this group with the same persistence that we now devote to fighting infections. After the age of 30 the weight should be approximately five to ten per cent below the average. More effort should be expended on vigorous treatment prior to obvious disability. This pays dividends in easier treatment of the condition. It is known that juvenile-onset diabetics, when treated early and adequately, will often have remissions in their diabetes for periods up to a year. What is not generally known is that adult diabetics also can have prolonged remissions. This is particularly true when clinical diabetes has not been rampant for too long a period of time. Even the simple measure of weight reduction has a physiological basis, for if we cannot expand the pancreatic capacity to fit the size of the overweight patient, perhaps we can shrink the patient to fit the capacity of the pancreas.

Better Future Tools

The elucidation of the structures of insulin shows that the long amino acid alpha and beta chains in the insulin molecular structure vary with each species. It is no small wonder that there are insulin allergies and often the development of antibody resistance when one realizes that beef insulin, commonly used in the treatment of human patients, has in the alpha chain alanine in the eighth position, serine in the ninth position and valine in the tenth position. In pork insulin there is threonine in the eighth position, serine in the ninth position and isoleucine in the tenth position. Obviously pork insulin differs from beef insulin. The human insulin structure is very similar to that of pork insulin with threonine, serine and isoleucine in the eighth, ninth and tenth positions respectively, but here the similarity ends because in position 30 in the Beta chain, beef and pork insulins both have alanine while human insulin has threonine. The wonder is

that present-day insulins have not produced more problems. One of the newer insulins that has been developed is a de-alanated pork insulin with the No. 30 amino acid removed. This almost approximates human insulin and some patients who had a marked resistance to the usual beef and pork mixture as well as to pork insulin or beef insulin individually had much less resistance and better blood sugar levels with much smaller doses of the de-alanated pork insulin. Perhaps the experimental use of synthetic insulins in the near future will show which portions of the amino acid chained structures are vital and necessary. Possibly these necessary elements can be synthesized to function directly without the development of antibodies. Possibly they could be taken orally. These new findings are coming none too soon, however, because just a few months ago Dr. Howard F. Root, President of the International Diabetes Federation, made the following statement: "The present-day problem of diabet far transcends the business of merely weighing foo checking urines and arguing endlessly about insul dosage. Of course, these details are important the individual but these are petty as compared the world-wide problem of diabetes, its heredity an effect."

It is too late to do anything about yesterday. I fact, today has nearly become yesterday. But thei is still time today to do something about tomorrov even with our present-day knowledge.

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BETTER CLINICAL INVESTIGATION

Certain things are clear. We need continuing research for newer and better drugs and for a greater understanding of the older ones. The needs are not only those of the scientific community, including the practicing physician, the pharmaceutical industry, or the Food and Drug Administration, but also those of the people served by these and other groups. It is clear that we must all work together for better clinical investigation. Not only are these groups involved, but the people of the country as well. Clearly, we are all in this together. —Harry C. Shirkey, M.D., in *Southern Medical Bulletin*, December, 1963.

MAMMAPLASTY — A CURRENT EVALUATION

John R. Lewis, Jr., M.D., *Atlanta*

■ ***Modification of breast contour is now a safe and practical procedure.***

ONLY THE CONTOUR of the face assumes more importance to the modern woman than the contour of the breasts. Through history this may have been true, and it is very apparent in our present society. The reasons for modifying the breast contours are many, but always the aim is to give a firm, full bust which seems well proportioned to the chest and says not subtly "I am feminine." Obviously, surgical intervention should leave fine line level scars which are located in the least conspicuous locations. For the most part this should be in the submammary fold for the buildup mammaplasty. For correction of the pendulous, hypertrophic breast the submammary incision may be connected by a vertical incision to the circular areolar incision.

The Pendulous Breast

The simple pendulous breast which is atrophic can frequently be corrected by addition of a plastic insert. This additional bulk will raise the contour of the breasts, raising the level of the nipple as much as two and one-half inches and giving the fullness and firmness which is desired. The pendulous hypertrophic breast must have the excess tissue removed and the remaining tissue reshaped to a desired contour. In the extreme case, this may best be performed by resection of a large part of the pendulous portion of the breast including nipple and areola. Reshaping the breast leaves a long semicircular incision in the submammary fold extending out to the anterior axillary fold, and the nipple and areola is reapplied as a free graft according to the techniques of Thorek and Adams. This technique gives a breast with a rather broad base and a rather flattened contour, though flaps of fat and breast tissue may be tucked up under to give a considerable fullness.

For the breast which is not extremely pendulous, there are several other techniques which resect a part of the lower pendulous portion of the breast tissue and fat, transferring the nipple and areola to a higher location. By excising a large inverted "V" of skin in a vertical direction downward from the areola and a double "V" of skin from beneath the breast, an inverted "T" incision results. This gives a breast with a small base and a much more conical contour with good forward projection. A fine example of this correction is the Bromberg technique. Obviously, the circulation to the nipple and areola must be scrupulously preserved as well as to the flaps which are used to build up the bulk.

The build-up mammaplasty is most often used for simple hypomastia with under-development of the breast tissue, but also is used for the breast which has been scarred or depleted by surgical resection. The build-up mammaplasty is a relatively simple operation following simple mastectomy if nipple and areola have been left intact. Atrophy and ptosis of the breast and flattening following resection of benign tumors can be largely corrected by build-up using plastic implants.

Reconstruction

For reconstruction of the breast which has undergone simple mastectomy for early malignancy or for benign or pre-malignant conditions (such as extensive chronic cystic disease) the tissues must be built up and stretched in one operative procedure and added to in a second operative procedure to accomplish a normal contour and size. This must be followed by a reconstruction of nipple and areola by the use of a full thickness graft from the labium minora. This graft is removed as a half circle of folded skin and thin areolar tissue which is unfolded to form a complete circle. This should be taken rather full, since it shrinks after removal, and should be allowed to cover in relaxed fashion the denuded area selected for its insertion. This allows for a proper take on the vascular bed of dermis which has been prepared, and allows for it to be puckered in the center to form the substitute nipple at a

subsequent operation. The donor area of the labium is closed by small chromic sutures and will heal promptly with minimal pain and discomfort.

Materials

The materials which have been used for augmentation of the female breast have been many through the past 15 years. The author has used chips of polyethylene, polyvinyl sponge, silastic sponge, and polyether sponge. All of these materials are tolerated reasonably well by the tissues but the first two in particular become very firm after being in the tissues for a period of several months, and polyvinyl sponge shrinks considerably over a period of months. Polyether sponge remains more soft and retains its bulk in a much better fashion but still must be put into the tissue in larger bulk than the final desired size. The compound prosthesis, with an insert of further plastic sponge inside the main sponge implant, has been used to minimize this tendency to shrink, but with the ingrowth of scar tissue into the interstices of the sponge implant a certain amount of shrinkage occurs and the implant becomes more firm. The use of Silicone rubber sponge (Silastic) has the same disadvantage of being much more firm than the normal breast.

For the past two years the author has been using an implant consisting of a contoured Silastic bag filled with Silastic gel and with a backing of dacron mesh, as designed by Cronin. This insert has

1-A and 1-B

Marked hypertrophy with marked ptosis of breasts. This degree of ptosis and hypertrophy causes considerable discomfort to the patient. Note the deep grooves to the shoulders where patient has been attempting to wear an uplift brassiere.

1-C and 1-D

Following bilateral partial amputation of breasts and transfer of nipples and areolae to a higher location following reshaping of breasts (reduction mammaplasty).

2-A

Side view of maderate ptosis and hypertrophy of breasts.

2-B

Side view fallawing reduction and elevation of breasts an chest wall (reduction mammaplasty). In this case the nipple and areola were remaved and replaced as a free graft, but nate that the nipple still retains its normal erection contour.

3-A

Simple ptosis and atrophy af breasts following multiple childbirth.

3-B

Following bilateral buildup mammaplasty af maderate degree. Nate the narmal contaur af the breasts.

4-A

Ptosis of breasts and scarring and relaxation af abdaminal wall.

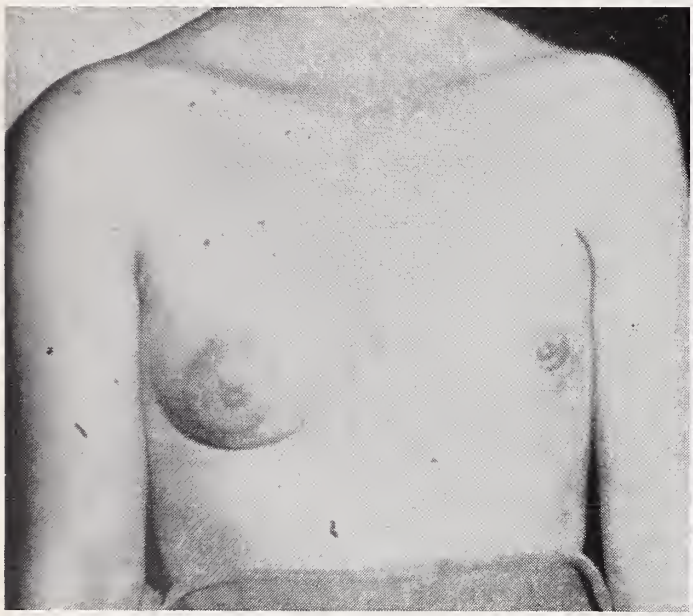
4-B

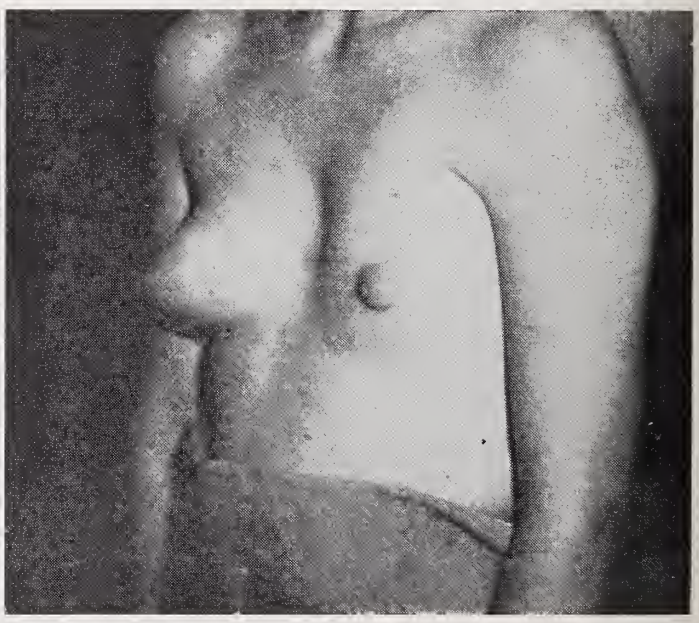
Fallawing bilateral buildup mammaplasty and scar excisian and abdominoplasty with tightening af abdaminal tissues.

the multiple advantages of being very soft (and in fact as soft as the normal breast), of retaining its original size, and of giving minimal tissue reaction. Naturally, the tissues do not grow into the implant except into the dacron mesh of the back of the bag which fixes it in position against the muscle fascia of the chest wall. Since the insert is not made overly large to allow for shrinkage, postoperative pain is minimal, whereas patients in whom plastic sponge materials have been inserted are very uncomfortable for 48 to 72 hours. The average patient receiving Silastic implants does not complain bitterly even the first postoperative day, and most are comfortable within 48 to 72 hours and are quite active in getting about, breathing deeply, and using the arms. These implants may be obtained in small, medium and large size to suit the various chest sizes and the demands made by varied deficiencies of tissue.

Not only does this implant have the advantage of being more comfortable, feeling more natural to the touch, and undergoing no shrinkage, but the patient may more comfortably lie prone without causing discomfort to the breasts after healing is complete. The only disadvantage noted by the author to date has been a slight fullness in the upper portion of the breast which has tended to subside as the tissue has relaxed. This has been due to the fluidity of the gel which has been forced into the upper portion of the breast by the pressure of the tightness of the tissue immediately after insertion.

Surgery of the male breast may be occasioned by gynecomastia. If incisions leave obvious scars the patient is usually as much or more embarrassed by the scars than by the previous enlargement of



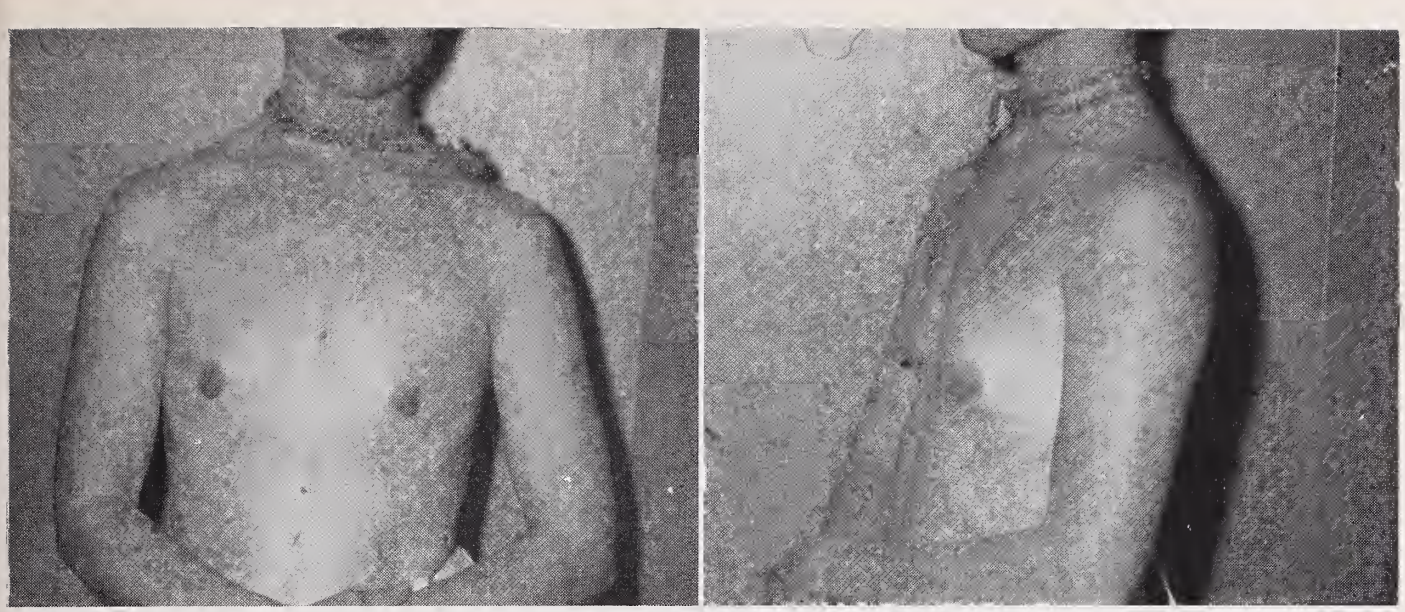


5-A and 5-B

Congenital marked underdevelopment of left breast and rather small right breast.

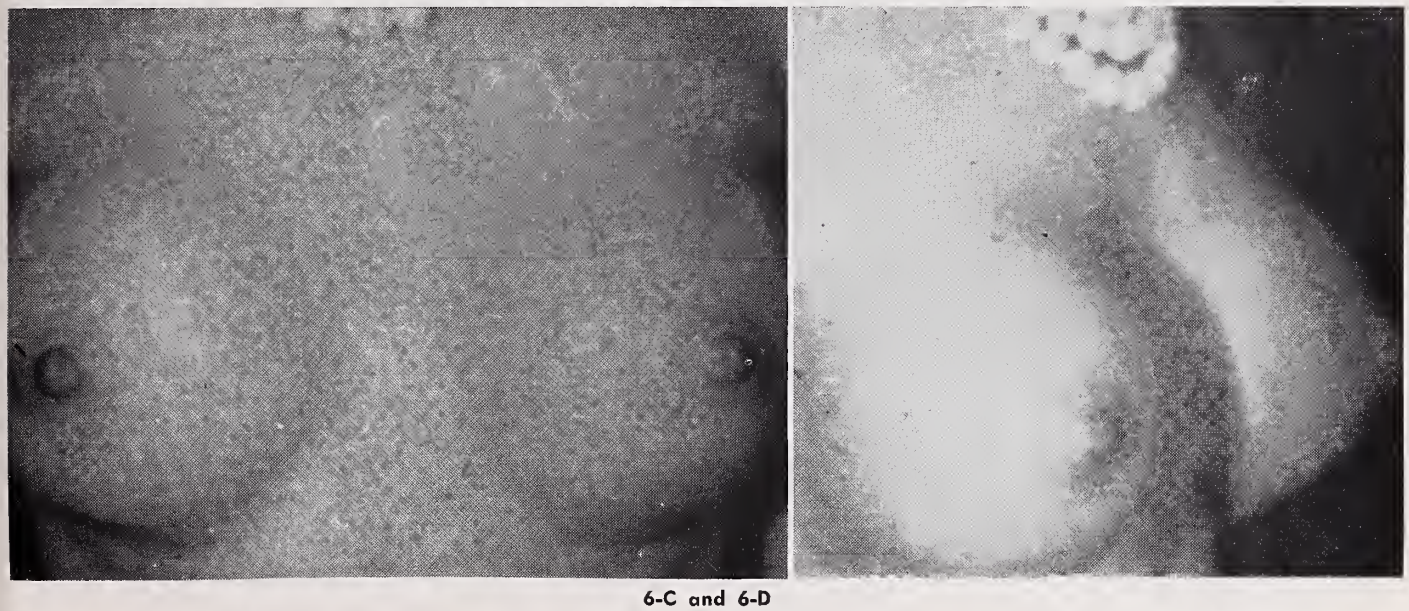
5-C and 5-D

Following marked buildup of breast on the left (rather marked degree of augmentation) and only moderate buildup of breast on the right. Breasts will undergo some shrinkage as plastic sponge material was used in this case.



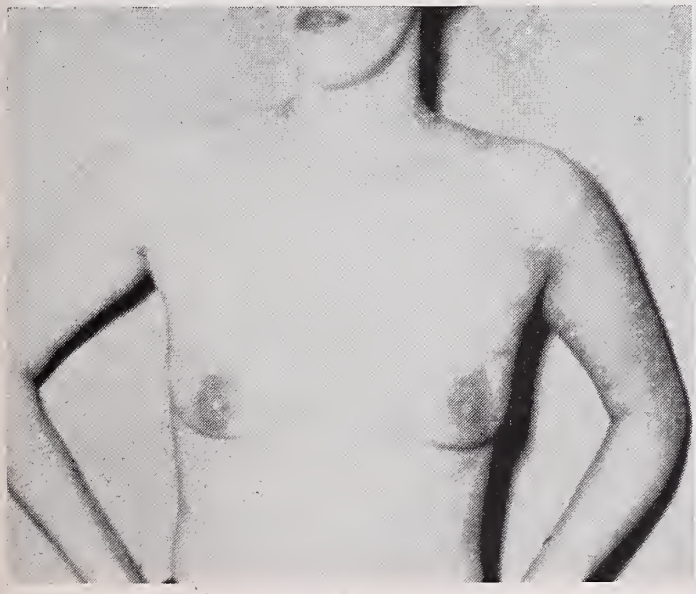
6-A and 6-B

Hypamastia with male type chest development but female type nipple development.



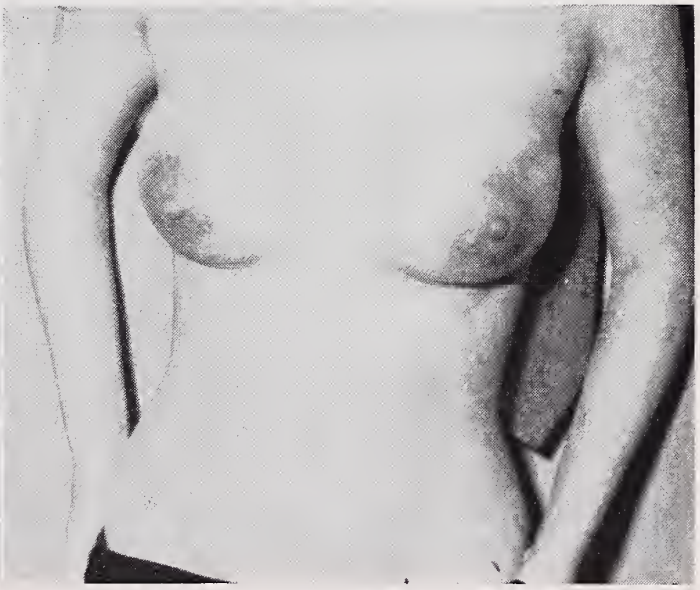
6-C and 6-D

Fallawing bilateral buildup mammaplasty thraugh incanspicuaus submammary incisian lying in the fold beneath the breast.



7-A

Atraphy and ptasis af breasts with scarring fallowing excisian af breast tumars bilaterally.



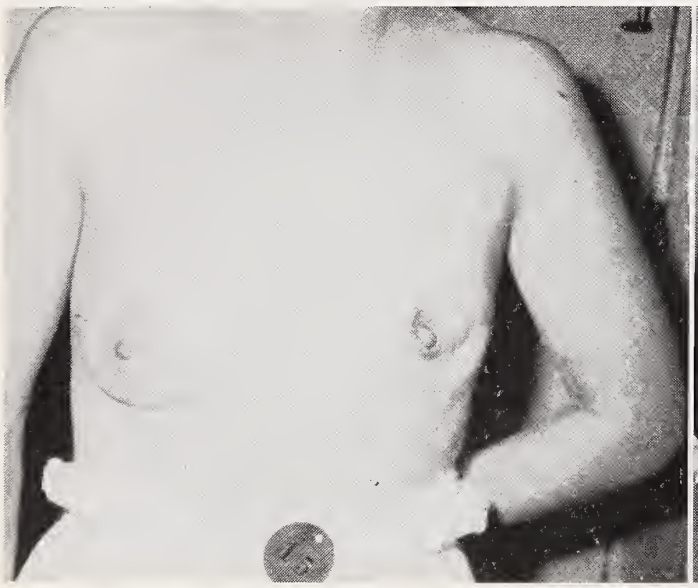
7-B

Fallawing bilateral buildup mammaplasty thraugh submammary incisions which lie hidden in the fold at the junction of breast to chest wall.

the breast. I cannot urge too strongly that a semicircular marginal incision be made at the margin of the areola for resection of breast and excess fatty tissue. Even if the bulk of the mass to be removed necessitates resection in two or three portions through this limited incision, it does not make the surgical procedure too difficult to the surgeon familiar with this area.

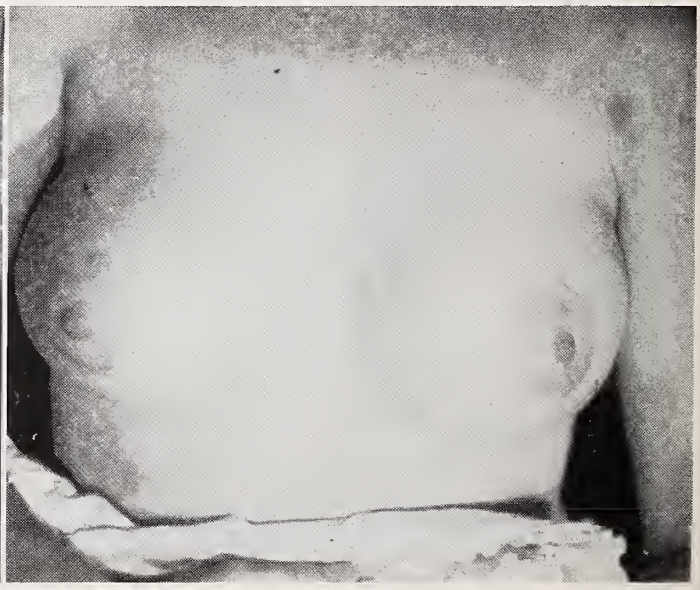
For losses of the nipple in the male, reconstruction may be carried out very satisfactorily by replacing the lost nipple and areola by skin from the scrotum. The texture and color are quite comparable to that of the normal nipple and areola, and the center of the graft may be puckered up to form a simulated nipple at a secondary procedure by using a small purse string suture. An incision may even be avoided by taking the purse string suture in the subcutaneous and dermal plane, bringing the suture outward through the same needle opening through which the needle was inserted. The suture is tied down and clipped at the knot allowing the knot to slip through the hole which the needle made.

If there is loss of subcutaneous tissue in the male breast, this can be replaced by a dermis-fat graft from the buttock, for the graft need not be thick. It is rarely necessary to use a plastic implant to build up the male breast. If there are traumatic or surgical scars extending across the chest, these may be broken up by multiple z-plasties at appropriate lines. Especially should the scar be broken up in the anterior axillary line.



8-A

Complete absence of left breast due to surgical removal of all breast tissue for chronic cystic mastitis with preservation of nipple and areola. Rather small right breast which is involved by chronic cystic mastitis.



8-B

Following surgical resection of breast tissue on the right for chronic cystic mastitis and buildup of both breasts with plastic materials.

9-A

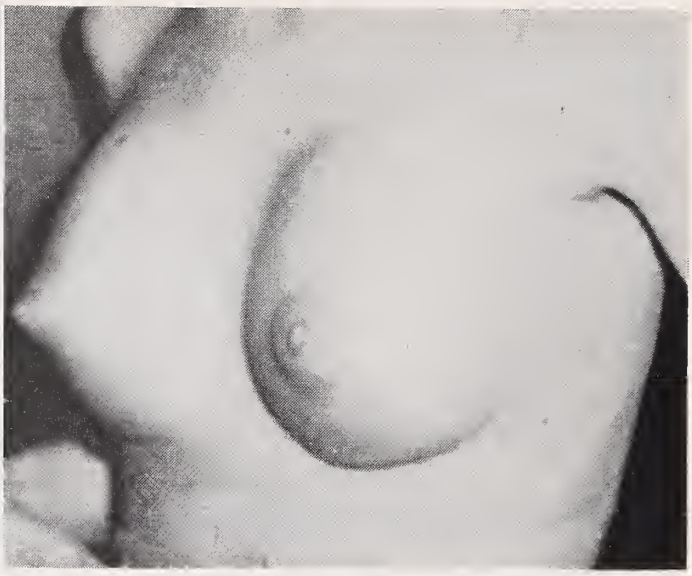
Complete absence of breasts and nipples and areolae following radical type simple mastectomy for marked chronic cystic mastitis.

9-B

Following reconstruction of both breasts using plastic sponge bilaterally and reconstruction of nipples and areolae by grafts from the labium minora bilaterally. The center of the grafts have been puckered to form simulated nipples. Sensation does return in these areas to some degree.

10-A

Simple hypomastia with underdevelopment of breasts.

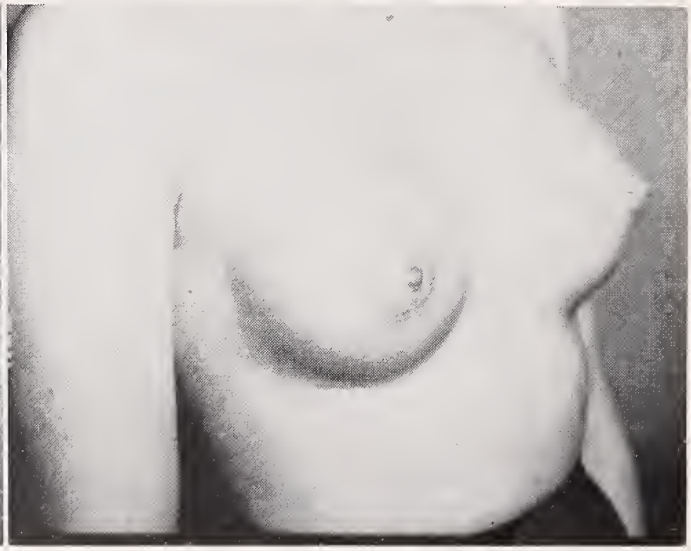


10-B

Following buildup mammaplasty using very soft Silastic Gel prostheses which are as soft as the normal breast.

11-A

Mild atrophy and ptosis of the breasts following multiple childbirth.



11-B

Following bilateral buildup mammoplasty using Silastic Gel prostheses to simulate the normal breast contour, size, and softness.

12-A

12-B

12-C

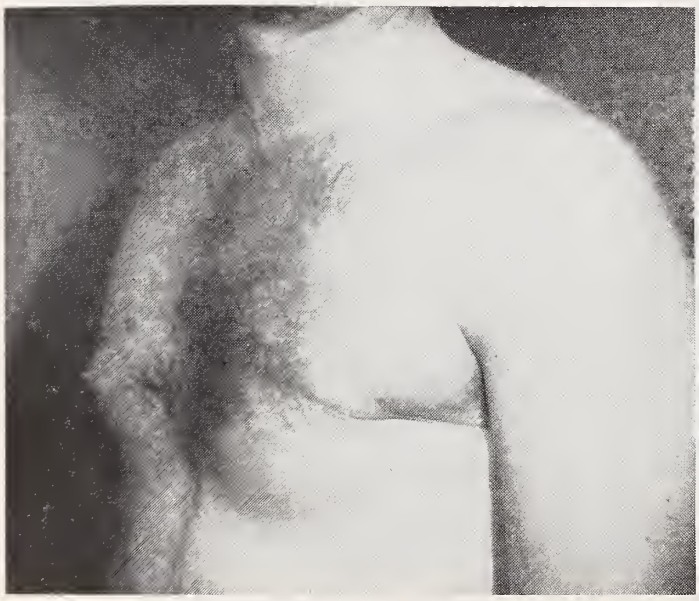
12-A—More marked ptosis of the breast with hypertrophy. This degree of ptosis can be corrected by buildup mammaplasty without extensive incisions. The submammary incision for insertion of the implant is all that is necessary. 12-B—Note the softness of the implant following buildup mammaplasty. 12-C—Short submammary incision at the time of the first dressing on the fifth day. Note the subcuticular suture which is used to close the incision.

13-A

Gynecomastia of rather remarked degree in teen-age boy.

13-B

Following resection of excessive breast tissue and fat of the breast through marginal areolar incision which does not show once the incision is healed.



14-A

Extensive scarring and deformity of the chest following ill advised surgery for gynecomastia on the left. Resection of nipple and areola was carried out by the surgeon when the breast tissue was removed.

14-B

Following excision of scars, repair of subcutaneous tissue from adjacent available subcutaneous fatty tissue, z-plasty behind anterior axillary line with scar yet still red, and graft to form nipple and areola from scrotal skin.

When there has been considerable scarring of the chestwall by injuries such as burns, it is often necessary to elevate skin, subcutaneous tissue and breast tissue on the chest wall, applying large split thickness grafts from the buttocks across the chest beneath the breasts to give the breasts relaxation and contour. With extensive scarring, nipples and areolae may be reconstructed by the use of labial grafts as has been described.

At some time every woman has dreamed of being a "femme fatale" and every man an "Adonis." Throughout history an adequate breast contour has been a necessary part of the ideal and the dream for the female, and an adequately muscular chest contour without scars transversing breast and chest for the male. Only during brief periods, such as the flapper era, has the flat chest in the female been popular. Similarly at other periods the overly full bust has been desirable, as in the gay 90's. For the most part an adequately full firm bust without a flat chest or a ponderous one has been the desirable contour. The accomplishment of this feminine contour is not a procedure available only to the professional entertainer, but is most commonly performed for the average young or middle aged adult, most commonly the housewife. The psychological lift accomplished by this procedure is often much greater than the lift of the tissues themselves.

478 Peachtree Street, N.E.

A GOLDEN OPPORTUNITY

Arthur A. Smith, M.D., *Atlanta*

■ ***Only about the time of the six-week checkup can a retroverted uterus be corrected without surgery.***

It has been noted by this writer over the course of a number of years that the retroverted uterus of one woman will remain in normal position after the use of a pessary, while the uterus of another will revert to its former position after the pessary is removed. Upon review of the office charts of patients in whom pessaries were used, it was found that almost invariably the retroverted uterus of a gynecological patient would fall backward to a retroverted position shortly after the pessary was removed. However, it was noted also that the retroverted uteri of many postpartum patients who had worn a pessary for awhile, were found to be in normal position on subsequent gynecological visits to the office. These observations, with their subsequent impressions, led this writer to pursue the subject further and prepare this paper.

Kanter[1] is of the opinion that the more general use of the properly inserted pessary will save patients from much discomfort and useless operative procedures.

A Need in Selected Cases

Novak[2] believes that the neglect of the pessary treatment of certain uterine displacements is a natural result of the remarkable development of gynecologic operative procedures. He goes on to say that the pendulum has swung too far and the present-day physician, because of the pessary's conceded shortcomings, has shut his eyes to the fact that this instrument fills a real need in a certain selected group of cases. The young physician of today frequently has no conception of what the pessary is meant to do, and he is apt to be even irritated at the suggestion that such an implement should be accorded at least a modest position in his armamemtarium.

In making this study, 1,000 charts of women who had had deliveries of term babies over the course of the past few years were reviewed. No records of women who had delivered less than a year from the time of this writing were used. Charts of those patients who were found to have third degree retroversion of the uterus at the time of their six weeks postpartum examinations were set aside. It was noted that the retroversion was treated in one of three ways. Some were advised to continue their knee-chest exercises for another four to eight weeks. Others were treated by the insertion of a properly fitted pessary for one to two months. And still others were required to wear a pessary for at least three months.

Examination After Removal

After the pessary was removed, all of these patients were re-examined at least twice during the next six to 12 months. Some were seen for the treatment of a cervicitis or vaginitis. Others were seen about one month after they had discontinued breast feeding, in order to examine their breasts to be sure that there were no areas of tumor or chronic mastitis present. On these occasions pelvic examinations were performed. Some were instructed to return in six months for a routine pelvic examination. All of the patients in this series were examined at approximately one year after delivery when they returned for their annual physical examination and Papanicolaou smear. There were 62 primigravidae and 82 multigravidae in this series.

During the course of this study on postpartum retroversion, the position of the uterus at the beginning of the pregnancy was also tabulated. Twelve

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of the primigravidae were considered to have had congenital retroversion of the uterus because on at least two pelvic examinations before their pregnancies, the uterus was found to be retroverted.

It was found in the course of doing routine pelvic examinations at six weeks after term delivery on 1,000 women, that 144 (14.4%) of them had third degree retroversions of the uterus. Ten of these patients were treated without pessaries and in each of them on at least two subsequent pelvic examinations during the first year, the uterus was found to be exactly where it was left at six weeks — in third degree retroversion.

In each of 19 patients in whom a pessary was used, but was removed for various reasons after only one to two months, the uterus was found to be in normal position in only two instances. Seventeen of these 19 patients (89.5%) were found on pelvic examinations during the next 12 months to have reoccurrences of the retroversions.

Each of the remaining 115 patients had a pessary inserted at the time of her six weeks postpartum examination and wore it for not less than three months nor more than four months. They were seen at intervals of no longer than four to six weeks during this period, to be sure that the uterus was being held in normal position by the pessary. In each of these 115 patients the uterus was in normal position at the time the pessary was removed. These patients were examined at least two to four times during the subsequent 12 months to determine the uterine position.

In 105 of the 115 patients the uterus was found to be in normal position on all subsequent pelvic examinations. Thus, it was found that over 90 per cent (91.3%) of all severely retroverted uteri found at the six weeks postpartum examination can be corrected permanently. In only ten patients was the uterus found to be in third degree retroversion.

It is interesting to note that in ten of the 12 primigravidae with a congenital retroversion, this was corrected by the use of a pessary for the first four and one-half months during pregnancy and for three months after the portpartum examination.

Relief Of Symptoms

Why the furor over whether the uterus is retroverted or not? True, many retroverted uteri are asymptomatic; but also, many are symptomatic. How do we know this? We know this because the wearing of a properly fitted pessary will relieve the symptoms.

Watkins[3] has summarized quite adequately most of the symptoms that a retrodisplaced uterus can cause. These symptoms are (1) lumbo-sacral backache; (2) a feeling of weight in the pelvis with a bearing down sensation; (3) menstrual symptoms, such as prolonged or heavy periods (menorrhagia) or painful periods (dysmenorrhea); (4) increased vaginal discharge (leukorrhea) resulting from hypersecretion of the cervix; (5) painful intercourse (dyspareunia); (6) frequency of urination if the trigone of the bladder is pressed upon; (7) constipation from pressure on the lower bowel, and (8) sterility or repeated abortions.

Therefore, if we can prevent future trouble at the six weeks postpartum examination by having the patient wear a pessary for at least three months, it is certainly worth it. The patients in whom pessaries were inserted at the postpartum examinations were seen approximately once a month until the pessaries were removed. Before the pessary was inserted an attempt was made to get the uterus out of the pelvis and to hold it manually in the normal anteverted and anteflexed position while the pessary was being inserted. This saves time and trouble since a larger sized pessary can be inserted with the uterus in normal position than if it cannot be brought all the way out of the pelvis. When the uterus cannot be elevated manually, the largest sized pessary that the patient can wear comfortably is inserted. She is instructed to return as soon as the pessary becomes uncomfortable. When she returns, the pessary is loose and the uterus is either in normal position or almost so. In these cases the next larger sized pessary is inserted. It will either hold the uterus up or get it up the rest of the way. When and if it becomes loose and uncomfortable, then a slightly larger pessary will hold the uterus comfortably in the normal position.

Reinsertion After Difficulty

Sometimes at the second visit, it was found that the part of the pessary that had formerly fit so well behind the symphysis pubis was now in the axis of the vagina where it could be an impediment when inserting the douche nozzle or during sexual intercourse. In this case, the pessary was removed; the part that fit behind the symphysis pubis was bent more acutely; and the pessary was cleaned and reinserted.

When it was felt that the uterus had been held by a pessary in normal position for three months, the pessary was removed. In some cases the pessary was only worn for one to two months. The reasons for this are varied. Sometimes the writer thought that the uterus was in such good position that the pessary was no longer needed and he removed it. In some cases the patients insisted that it be removed

because their husbands objected to it. In rare cases, the pessary slipped down and partially protruded and the patient removed it herslf and brought it back to the office. In other patients, especially those with a short anterior vaginal wall and a deep posterior fornix, a properly fitted pessary (even one with a deep urethral groove) caused retention of urine and subsequent cystitis. In these the pessary had to be removed. Those patients who developed or had a flare-up of a symptomatic monilia or a trichomonas infection while wearing the pessary had to have it removed, as the writer had found from past experience that it was virtually impossible to clear these up with local therapy while a pessary was in the vagina.

Findings

Thus, it was found from this study that over 90 per cent of women can be cured permanently of a postpartum retroversion if they will wear a properly fitted pessary for three months.

These findings are in agreement with the statement of Lowrie[4] that retrodisplacements of the uterus in the puerperium are practically the only ones that can be cured by the pessary. This 90 per cent correction rate is in sharp contrast to a 0 per cent correction rate when no pessary is used postpartum and an almost 0 per cent permanent correction rate when a third degree retroversion is treated with a pessary in a gynecological patient. Thus, the title of this paper evolves, "A Golden Opportunity." It is a golden opportunity because at only this time in a woman's lifetime, her six weeks postpartum check-up, can her uterus, if retroverted, be corrected permanently without surgery. If we do not correct the retrodisplacement at that time, we have missed the boat.

Like Wet Cement

The soft and pliable pelvic fascial supporting tissues and ligaments that hold the uterus in place can be likened to wet cement. The form in which the cement is held until it dries will be the position in which it remains from then on. The position in which the uterus is kept while its supporting structures are hardening is the position in which it will remain. This is exactly why the uterus of the non-puerperal woman is drawn right back into its former retroversion as soon as the pessary is removed.

It has been found by the writer that the simple maneuver of replacing the retroverted uterus manually at the time of the six weeks check-up is of no value. All that it does is salve the physician's conscience. It can be likened to wearing a pessary for one day. It is worthless.

The pelvic supporting structures in some patients are inherently weak. Thus, it is not at all surprising that about ten per cent of uteri will become retroverted even after puerperal women have worn pessaries for three months. Futhermore, it is not difficult to understand why a non-gravid uterus will remain in normal position, yet, when it becomes gravid, the increased weight is too much for the supporting tissues and it becomes retroverted.

A Smith-Hodge type of plastic folding pessary which was manually shapeable was used in most cases. This was found to be the most satisfactory. The Risser pessary is similar to the Hodge, except that the anterior and posterior bars are wider. This type was used by the writer for a time. Its use was discontinued after a few instances of vaginal bleeding from erosion of the vaginal walls. It was concluded that the reason for this was that the lateral bars of this pessary were too short in proportion to the anterior and posterior bars.

Experience In Use

Finally, the author has come to the conclusion that physicians who are adverse to the use of pessaries in the postpartum period are those who have had very little or no experience with the use of the pessary. These persons, because of limited experience, are not qualified to discuss the use of the pessary in the first place.

Summary and Conclusions

1. In a series of 1,000 postpartum examinations following term deliveries, it was found that 14.4 per cent of uteri were in third degree retroversion.

2. When no attempt was made to correct the retroversion with a pessary, the uterus remained retroverted in spite of temporary manual replacement.

3. When a retroverted uterus was held in position for two months or less with a pessary, the retroversion reoccurred in 90 per cent of cases.

4. With the use of the pessary in the puerperium, 83 per cent of congenital retroversions of the uterus can be corrected permanently.

5. This paper shows that 90 per cent of all severely retroverted uteri found at the time of the six weeks postpartum examination can be corrected permanently if a properly fitted pessary is worn for at least three months.

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A SURGICAL APPROACH TO NYSTAGMUS

Robert E. L. Shumate, M.D., *Columbus*

■ ***This procedure used successfully by the author is one not generally known.***

I WOULD LIKE to describe a relatively new surgical approach to the problem of nystagmus. This procedure is as safe as strabismus surgery; I know of no instances where the visual acuity failed to improve, and it can be applied to nystagmus caused by any one of a variety of things.

The surgical procedure is not one which I devised, but one which is not generally known. I first learned of this at a meeting in Canada three years ago. The man who has done most of the work with this procedure is Dr. Robert C. Laughlin, professor of Ophthalmology at the University of Washington in Seattle. He submitted his material for publication in the form of a thesis to the American Ophthalmological Society and I believe he plans to publish it in one of the ophthalmological journals soon, after he has had a chance to re-write the material.

The Procedure

The surgical procedure consists simply of recession of both the medial and lateral recti muscles back to the equator of the globe. This produces slack in the muscles which produce the nystagmus and consequently reduces the amplitude of the nystagmoid movements. This in turn improves the visual acuity. The purpose of the surgery is to improve the visual acuity. It will not completely stop the nystagmus.

I have done only two of these procedures here in Georgia since returning to my native state about a year and a half ago from Seattle, Washington. Both of these cases were on young people. I would like to give you a brief summary of the results.

The first case was J. C., a 19-year-old white textile worker with congenital nystagmus. He had two younger brothers who had the same problem, but they lived out of the state and therefore I did not get to examine them.

His best visual acuity with glasses prior to surgery was right eye, 20/100; left eye, 20/70. He had a right exotropia of about 15° with no fusion. I recessed all four horizontal recti muscles and four months after his surgery his best visual acuity was right eye, 20/50; left eye, 20/40, but he was able to read three letters in the 20/30 line with the left eye. He had never been able to obtain a driver's license legally, but he was crazy about cars and had done some illegal driving. Following the nystagmus surgery he was able to successfully obtain a driver's license. His exotropia increased from 15° to about 25°, but he was very happy with his visual result.

The other case was J. L., a 23-year-old albino female. Her best visual acuity prior to surgery was right eye, 20/400; left eye, 20/400. She had no fusion and an alternating exotropia of about 15°. All four of her horizontal recti muscles were recessed to the equator and about four months after her surgery her visual acuity improved to right eye, 20/100; left eye, 20/200. Part of her low visual acuity was on the basis of myopic degeneration. She required about a minus 9.00 sphere. Her exotropia went from about 15° prior to surgery to about 25° following surgery.

I have since had occasion to examine several other nystagmus cases, but felt that surgery was not indicated. One of these cases was a rotary nystagmus. This might have responded to a recession or tonotomy of the oblique muscles, but I felt that the visual acuity of 20/50 was good in spite of the nystagmus, and did not recommend the procedure. The other cases I have examined and felt surgery was contraindicated, were cases where both fusion and depth perception were present, plus reasonably good vision (20/40 or better).

Patients should be told that their exotropia can be expected to worsen, but the rewards of improved vision should be worth the slight cosmetic problem. The exotropia might be minimized by selecting the eye which has the best visual acuity and doing a unilateral procedure on the fixing eye.

1951 Eighth Avenue

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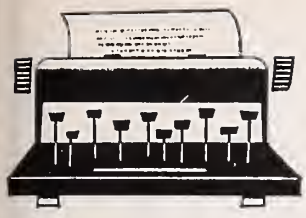

EDITORIALS

The Georgia Heart Association Medical Museum

An historic tracing of the first recording by direct arterial pressure measurement of blood pressure in man, made by Dr. W. F. Hamilton of the University of Georgia Medical School, was presented to the Georgia Heart Association by Dr. Harry B. O'Rear at the recent meeting of the Georgia Heart Association in Augusta. A beautifully prepared plaque demonstrating this historic achievement was prepared and will form the nucleus of a museum planned by the Georgia Heart Association.

Under the leadership of Dr. Willis Hurst, Professor of Medicine at Emory University Medical School, and during his presidency of the Georgia Heart Association, the historic committee is planning to develop a museum in which such notable displays may be kept permanently and in which original apparatus or pictures of workshops in which notable work has been done can be preserved.

As May Be Acquired

There is also a plan to compile as much of the evidence of Georgia's contribution to the fight against heart disease as may be acquired. Such noteworthy achievements as cardiac catheterization done at Grady Hospital by Dr. James Warren and Dr. Emmett Brannen and their co-workers will be recorded. It was here that the first case of cardiac catheterization producing a diagnosis of an interatrial shunt was made which was later proved at autopsy to be a correct diagnosis. It will be here recorded that Dr. Blalock, who made such contributions to heart surgery, is a Georgian. Some of the first work with Heparin introduced by Georgians will be preserved. It is hoped that anyone in the state who knows of original significant work in connection with medical progress done by Georgians will communicate with the historical committee of the Georgia Heart Association and contribute information which may be preserved in this setting.

The importance of this program can be illustrated by remembering the confusion which surrounded the discovery of ether. Dr. Crawford W. Long of Georgia used ether for the induction of anesthesia in surgical operations before witnesses, but did not publish this in a scientific journal where it could become general knowledge until after similar demonstrations by Dr. Morton in the so-called Ether Dome at the Massachusetts General Hospital had become widely known. Later when a controversy was raging as to who had priority and to whom a statue for the discoverer of ether should be dedicated, Dr. Oliver Wendell Holmes suggested that it be dedicated to "Either." This illustrates humor and diplomacy, which we hope will not be necessary in dealing with the future discoveries of Georgians or the unrecorded works already accomplished in our state. Won't you please contribute any knowledge that you may have concerning work which should be preserved for posterity.

Joseph C. Massee, M.D

A Battle Many Times

The saga of the now ill-fated "medicare" proposal which languished about in the Congress for these past two years may never be fully unraveled. Its ultimate demise (though it will probably be resurrected next year) came in the closed door surroundings of a Senate-House Conference Committee meeting at the eleventh hour of this most recently concluded session of congress.

The interesting aspect here is that this legislation should die at all. Each of us has heard the rationale, made with almost unbearable repetition, that should the House of Representatives ever be given a chance to vote on the King-Anderson bill that it would pass with ease. The truth of the matter is that this bill failed to pass because its proponents simply could not get up the votes necessary for enactment.

The chance was theirs. Opportunity knocked loud and long, but the threadbare arguments of their most eloquent spokesmen could not stand up in the face of the articulate opposition provided by the practicing physicians of this country.

One should logically ask why the Administration didn't have the votes to pull this one through. After all, this was one of only two major Administration bills on which Congress turned "thumbs down." It was a part of the 1960 and 1964 campaign platform of the majority party in Congress. It was said to have great voter appeal. It was even proposed at one time as a legislative memorial to the late President Kennedy. Why, with all the so-called advantages, did the Congress consign it to limbo? The answer is easy to recite. It was not easy to accomplish.

Physicians are, by nature, oriented to a crisis situation. The situation in Congress regarding "medicare" reached crisis proportions about 30 days prior to adjournment. True to the traditions of the profession, physicians mounted an opposition campaign so massive in scope, so thorough in detail as to change what had been predicted as certain defeat into sweet victory. The doctors of Georgia played a large hand in this victory and they have every right to be proud of their contribution. It would be an impossible task to adequately describe the dimension of their efforts. In size and intensity it was without precedent and therefore no yardstick exists. Without going into detail, however, suffice it to say that this was a "team victory" and for once there were decidedly more Indians than chiefs.

The only thing that keeps this from being a complete story is the almost certain assurance that this legislation will be introduced again and again. One can't help but recall the words of the late, great Senator from Oklahoma, Robert S. Kerr, when he said that, "medicine may have to win this battle many times, but it can lose it only once."

Health Opportunity Program For the Elderly

A NATIONAL EDUCATION PROGRAM emphasizing the health care benefits currently available to elderly citizens was initiated during the month of October. This public information campaign, "Health Opportunity Programs for the Elderly," was co-sponsored by the American Medical Association, the Medical Association of Georgia and its 72 component county medical societies.

To Inform the Public

To effectively inform the public of these existing benefits, all communications media—newspapers, magazines, television, radio, pamphlets, etc., were used in promoting the positive aspects of Kerr-Mills and other comparable state and local health care assistance programs for senior citizens. The intent of this campaign was to reverse the emphasis from the negatives of "medicare" to the positives of Kerr-Mills and other broad programs designed to provide care for persons over age 65 who need help.

Throughout Georgia, newspaper advertisements sponsored by county medical societies were run the week of October 11. Radio and TV spot announcements reinforced these public service advertisements in promoting Kerr-Mills. To further explain the advantages of existing programs and the disadvantages of "medicare," Dr. Edward Annis, AMA Past President spoke to the American public on a half-hour national TV program.

Throughout the entire education campaign, emphasis was placed on urging the public to discuss these matters with their doctor. Georgia physicians were notified of the campaign and given reference material for use in advising patients about Kerr-Mills and the numerous state and local health benefits for elderly citizens. It is now the responsibility of each doctor to tell this story on a personal level and render aid and assistance in advising senior citizens about the Health Opportunity Programs for the Elderly.

PRESIDENT'S LETTER

MUSINGS AT THANKSGIVING

With Thanksgiving Day coming up soon, I can't help but think back a long time ago. November days were then—I'm sure—as they are today. Very little has changed except me. The air then was usually crisp, the frost had curled the grass, most trees were bare, the leaves on the cotton and corn were dead, the crops were gathered with the exception of a boll of cotton here and there—late in opening—or an ear of corn that went unnoticed by the tired eye of the corn picker. Barns were overflowing with corn and hay; pantries were filled with jars of preserves, fruits and vegetables; chickens and turkeys were plentiful—the cows and hogs were slick and fat.

A Family Time

We usually thought of Thanksgiving as a family day and a time for hunting. I guess these ideas came from the stories we had read or had handed down from the Pilgrim fathers, who went hunting in groups or with friendly Indians and brought in wild game to celebrate this particular season.

My father, as long as he had an agile step and clear vision, heartily endorsed this traditional custom. He always hunted on Thanksgiving Day if the weather was "fittin," and many times when it wasn't exactly "fittin." These latter times, in my childhood, caused my mother great anguish, especially if I had extracted from my father a solemn promise to accompany him as a rabbit bearer. She was always afraid that I would get pneumonia, or slip down and break an arm or leg, or any of the terrible things that a mother can think of, especially when she was not exactly pleased by her headstrong husband taking their young son off at daybreak, to roam the woods and swamps on a bleak and dismal November day—to tote rabbits and learn to shoot.

Anyway, we usually got home before dark, picked the birds and cleaned any other game down by the syrup still. If we had enough quail for supper, that was par excellent. If not, we added some doves or a rabbit or squirrel—whatever it took. My mother would have already cooked a big pot of grits or rice and vegetables and had several pans of biscuits ready to go in the oven with the sweet potatoes.

My father asked the good Lord to bless the food. We ate heartily as only men and boys can eat who have been following the dogs all day, and a mother and daughters who have been working in the home and getting ready for the big Thanksgiving supper. It was usually just us, but sometimes we had uncles and aunts and their families.

We didn't think too much about church on Thanksgiving in those days, and I don't think the preachers did either; if they did, I never heard of it. Some of the non-hunters invited the parson out to dinner in the middle of the day, especially if there had been a cold spell and they had killed a fat pig. There was nothing our preacher liked better than turnip greens, collard greens, blackeyed peas, backbone and sweet potatoes—with a little cracklin' cornbread and fresh buttermilk. When the preacher asked the Lord to bless such a table as this, even a sinner would know that it was Thanksgiving Day.

Things Have Changed

As I've grown older, for some reason things have changed. I still like to be surrounded with family, but I do not have the strong and virile urge to shoulder gun and harken to the dogs at daybreak for a day in fields and woods, climbing fences and wading streams. I am not enthusiastic about jumping ditches and being entangled in honeysuckle vines, nor do I relish the swish of a thorn laden branch brushing across my face or hand and legs. I bequeath this manly sport now to my sons and sons-in-law.

I think instead of a nice two hour hunt in a jeep or buggy, or better still, a seat in a clump of brushes in the corner of a millet field in the afternoon. I can be comfortable there, all alone, and recount the joys and sorrows over the years.

And then too, I like to go to church on Thanksgiving Day and say a prayer of gratitude for those things dear to us all, our parents, our wives, children and grandchildren, friends and patients. Lots of

times nowadays on a dove field or in church or paddling my boat and fishing—especially in the splendor of the autumn—I get to thinking of all the things to be thankful for. It's good for all of us—husbands and wives—to sit alone sometimes and just unfetter our mind, and let it wander—and dwell for a little while on "how much worse thing could have been"—and be thankful for what we have.

J. G. McDaniel, M.D.
President, Medical Associaion of Georgia

MEDICAL COLLEGE TO INSTITUTE RADIOLOGIC TECHNOLOGY PROGRAM

A baccalaureate (bachelor's degree) program in Radiologic Technology has been inaugurated by the Medical College of Georgia. The first students are expected to be admitted to this new course of study during the academic year beginning this month.

Establishment of the program was announced today following a recommendation by Harry B. O'Rear, M.D., Medical College president, and approval by the Board of Regents of the University System of Georgia.

Inauguration of the new degree program, says Dr. O'Rear, "has resulted from an expanding need for technicians with a broad academic background in diagnostic and therapeutic radiology and nuclear medicine."

"It is the college's aim," Dr. O'Rear added, "to produce radiologic technologists who will be teachers, leaders, and highly skilled members of the medical team."

Administrator of the program will be Mr. Cecil H. Hall, who presently is serving as director of the college's X-Ray Technology training program. The faculty will consist of physicians and qualified technicians associated with the Department of Radiology.

Students admitted must have acquired two years of acceptable undergraduate credits. After successfully completing two years of additional course and laboratory work and a year of internship at the Medical College, students will be awarded a Bachelor of Science degree in Radiologic Technology.

"Because of the exceptional qualifications we consider to be necessary," says Hall, "present plans are to accept only a strictly limited number of students each year. However, as the need for highly qualified radiological technologists increases with further advances in the profession, the initial quota likely will be enlarged."

The curriculum for the college-level radiological offering will include classroom and laboratory instruction in elementary radiation therapy, elementary radiologic physics, basic radiologic techniques, film critique, equipment construction and maintenance, nuclear medicine, departmental administration, and other appropriate courses.

Implementation of the program places new emphasis on plans to further develop the Medical College into a state-aided health sciences complex geared to provide personnel for most of Georgia's increasing health needs.

1964-1965 CALENDAR OF MEETINGS

State

January 25-27, 1965—American College of Surgeons (sectional meeting) Atlanta Biltmore Hotel, Atlanta.

May 2-4, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

November 18-21—Congress of Neurological Surgeons (14th) Bal Harbour, Fla.

November 28-29—American College of Chest Physicians (interim meeting), Fontainebleau Hotel, Miami Beach, Fla.

November 29—Sixth National Conference on the Medical Aspects of Sports, in conjunction with the AMA Clinical Meeting, Miami Beach, Fla.

November 29-December 2—American Medical Association Clinical Meeting, Auditorium and Exposition Hall, Miami Beach, Fla., and the Americana Hotel, Bal Harbour, Fla.

December 4-5—Southern Society for Pediatric Research, Shamrock-Hilton Hotel, Houston, Tex.

December 8-10—Southern Surgical Association, Boca Raton Hotel, Boca Raton, Fla.

January 14-16, 1965—Gastroenterology Seminar sponsored by the University of Florida College of Medicine, Gainesville, Fla.

January 21-23, 1965—Pediatric Seminar—"Current Concepts in Allergy and Clinical Immunology in Childhood," sponsored by the University of Florida College of Medicine, Gainesville, Fla.

January 29-31, 1965—Southern Radiological Conference, Grand Hotel, Point Clear, Ala.

February 13-17, 1965—American Academy of Allergy, Americana Hotel, Bal Harbour, Fla.

February 19-24, 1965—American Society of Abdominal Surgeons, Jung Hotel, New Orleans, La.

February 25-March 2, 1965—American Dermatological Association, Boca Raton Hotel, Boca Raton, Fla.

February 26-28, 1965—Virginia Pediatric Society, The Greenbrier Hotel, White Sulphur Springs, W. Va.

National

November 9-21—Postgraduate course in Laryngology and Bronchoesophagology sponsored by the Department of Otolaryngology, University of Illinois College of Medicine, Illinois Eye and Ear Infirmary, Chicago.

CANCER PAGE

IS THE EDUCATIONAL PROGRAM DOING ANY GOOD?

A. H. Letton, M.D., *Atlanta*

MANY OF MY DOCTOR friends have asked me, and truly I have asked myself, "Is the American Cancer Society's educational program doing any good or are they just scaring people?" My answer to myself and my friends has always been that I have seen many patients die of cancer but very few die of fright. But recently the State Department of Public Health, Division of Biostatistics released statistics garnered from the Tumor Registries of our state. This department is somewhat behind on getting statistics out, for these were only *three-year survival figures* but even with this, there *is* a great increase in three year survival in many types of cancer over a few years ago.

Fifty Per Cent Survival

These statistics showed a 50 per cent three-year survival for cancer of the breast from the state at large. This spurred me into the problem of finding out what progress has been made. In 1948 I had checked the five-year survival at one of the Atlanta hospitals and found it to be 34 per cent which compared favorably with results reported in the literature at that time.

I asked the Tumor Registry to find the five-year survival, 1956—1959, in this same hospital. They report 62.5 per cent five-year survival. This is a remarkable increase of 28.5 per cent in 15 years, and yet there has been no major change in the type of treatment this type cancer patient receives when compared with 1948.

What then is the reason for this increase? The answer must be that the patients are presenting themselves when the disease is more curable and the physicians in our state are advising treatment earlier. In other words, *the patient and the physician time lag is being shortened*—Why? The major reasons must be the result of the Educational emphasis of the American Cancer Society which is definitely a part of the April Education-Funds Crusade as well as the year 'round educational program in clubs and employee groups.

In appreciation of this, the Professional Education Committee consisting of doctors from all over our state passed the following resolution during the recent meeting of the Georgia Division:

"WHEREAS, the *five year survival rate* for cancer of the breast has increased from 34 per cent in 1948 to 62½ per cent in 1963, as reported by one of Atlanta's larger hospitals; and

WHEREAS, this marked increase in the five-year survival cannot be due to improvements of treatment *except to a small extent,* this increase in saving lives must be due to the women presenting themselves at a time when this disease is more curable which, in turn, *is a result of the educational program* of the Georgia Division, American Cancer Society;

THEREFORE, be it resolved that we, the physicians of the Professional Information Committee, *commend the volunteer workers* in the various Units of the American Cancer Society, Georgia Division *for emphasizing the life-saving educational message* in their annual Education-Funds Crusade, each April, as well as year-round educational programs and that we urge every volunteer to redouble his or her efforts *to arouse to protective action* all persons through the programs of the American Cancer Society.

We further urge all *physicians* of Georgia to offer their volunteer services in training lay volunteers and in acquainting the lay public with the urgent importance of an *annual physical examination,* including not only instruction of the individual patient in *Breast Self-Examination,* but also *sigmoidoscopic* examination, X-rays of the lungs and Pap smears."

This, in answer to the question, "Is the American Cancer Society's educational program doing any good?" must be an emphatic "Yes!"—it is helping to save lives that otherwise might be lost. There can be no higher or nobler attainment in the province of any volunteer health agency.

340 Boulevard, N.E.

Approved by the Professional Education Committee, Georgia Division, ACS.

IATROGENIC HEART DISEASE

Henry S. Jennings, Jr., M.D., *Gainesville*

ALTHOUGH THE USE of "iatrogenic" may be open to question, the intended purpose of this paper is to present certain ideas about heart disease which relate to the manner in which the physician approaches and/or manages a patient with presumed, or real, coronary atherosclerosis. In other words, the attitude, training, perception, skill, patience, experience and wisdom of the physician will affect the ultimate diagnosis and management.

Attention Directed

It has been centuries since the description of angina by Heberden. Several decades have passed since Herrick's outstanding contribution to the understanding of coronary occlusion. The increase in knowledge of the pathophysiology of the coronary circulation, the development of multiple "tools" used in the evaluation of patients, the advances in research on atherosclerosis—much of this having come about in the past 15 to 20 years—has resulted in greater attention being directed to the age-old problem of coronary atherosclerosis than ever before. No longer, for instance, do people die of "acute indigestion." Now, specific information can be obtained to ascertain whether ventricular fibrillation or cardiac standstill was the actual cause of death after an actue myocardial infarction.

Along with the acquisition of increasing medical knowledge, the medical profession has an equally important responsibility of following the adage, "Primum nil nocere" (first of all, do no harm). For a number of years, there has been an increasing *awareness* of arteriosclerotic heart disease. In some areas there seems to have been an increasing *eagerness* to diagnose arteriosclerotic heart disease. The pendulum seems to have been swinging from an inability to make an accurate diagnosis to a willingness to seek and pick and search for any possible reason to label a patient with the diagnosis of arteriosclerotic heart disease. Consider the 31-year-old healthy male with chest pain (and probably, from history, hyperventilation) whose serial electrocardiograms were normal, with no abnormalities in LDH and SGOT values, normotensive, blood cholesterol (for whatever its worth) within normal limits, and with an historical background sufficient to precipitate functional illness. This man was hospitalized, bedrested, and even anticoagulated! Even more distressing, he was thoroughly possessed with the idea that he had suffered an acute myocardial infarction. Consider the 48-year-old healthy, normotensive, slender, non-diabetic, menstruating female who had (by history) a classical, and severe, hyperventilation episode on the eve of her only daughter's wedding. When seen *one year* later she was only then being allowed by her physician to get out in the automobile, go to church, and superfically resume a few normal activities. An electrocardiogram was not even done at the time of the initial episode.

Can Be Avoided

These are not isolated, nor the only, such misdiagnoses. Occurrences such as this are all too frequent, and, to a great extent, avoidable. The medical profession has a responsibility to use wisely and properly the great store of information and modern electronic devices available at this time. Physicians also have the ability to carefully (repeatedly, if necessary) evaluate the history, perform a comprehensive physical examination, and then to consider accessory data. Many errors in overdiagnosis can be avoided by the astute physician if proper emphasis is given to historical features and proper interpretation made of non-specific and insignificant electrocardiographic abnormalities. Needless to say, there are instances in which no diagnosis can possbily be made. In such cases there is a great need for a crystal ball, and the writer would be among the first to obtain such if available.

1114 Vine Street

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

LEGAL PAGE

TERMINATING PRACTICE

John L. Moore, Jr., *Atlanta*

MEMBERS of The Medical Association of Georgia often request information as to problems they meet on retiring from practice. The problems face the sole practitioner more than the physician who practices as a member of a group.

The principal problems, other than normal business arrangements regarding the disposition of office space and equipment, are:

What notice should I give my patients?

What should I do with patients' medical records?

Notice of Retirement

A medical doctor, under Georgia law, must give written notice of his withdrawal from practice to any patient whose treatment, convalescence, or recovery period might possibly be considered incomplete at the time of the doctor's retirement. Otherwise, the doctor might be held to have "abandoned or withdrawn from the case," thus creating liability for malpractice to the patient abandoned.

Reasonable notice in such circumstances would seem to be about 30 days. The form of announcement is not important although it should contain clear advice of the date on which the doctor will retire. The notification should also advise patients to obtain the services of another physician after that date. The retiring doctor should offer to make his medical records available to the new physician who will serve the patient. Very importantly, as discussed later in this article, the notification should also send a form for consent by the patient to transfer the records to the other medical doctor.

The retiring physician should then stand ready to discuss with the patient the names of other physicians who could serve.

Patient's Medical Record

As mentioned above, the retiring physician should offer to the patient to turn over the medical record to the patient's new physician. Under Georgia law, a medical doctor is not under any direct legal obligation to retain his records on individual patients as such records are the physician's personal property. It is obvious that the medical doctor will not wish to turn over his medical records directly to the patients except in unusual circumstances. He cannot, without the patient's consent, turn over the medical records to another physician. If the retiring doctor is a member of a partnership, patients' medical records belong to all the partners and no specific consent to leaving the records with the remaining partners is necessary. In such circumstances, there is no problem.

It is more difficult to determine what is correct where another doctor has been sharing office space with the retiring doctor. If the two alternate patients regularly and, as to professional matters, act as a team, then it would probably be proper to infer consent of the patients to turning over the records to the doctor who shares office space. However, again, it would be wise to have a consent form signed by the retiring doctor's patients.

Retention of Records

The retiring physician has an interest in retaining his records because of the possibility of suit for malpractice. The statute of limitations (the period of time after which a plaintiff cannot sue the defendant) is two years in malpractice actions. However, the two year period does not begin to run until completion of the particular treatment, or during minority of the patient, or during the patient's mental incompetency. The time also does not run until discovery of a condition or injury by the patient himself. Accordingly, it would be over-simplified to state that the retiring doctor needs to retain medical records not requested by the patient only two years. The retiring doctor can reduce the number of records he has to keep if he has accurate records on patients who died more than two years before the date of retirement.

It is possible only to state that medical records should not be destroyed sooner than two years after retiring from practice. There are special warehouses which provide fire-proof and confidential storing of

professional records and at quite reasonable cost. After a period of time, if storage becomes expensive, microfilming may reduce overall costs.

Retention of records can also be vitally important in given cases in providing good patient care. This obviously is the first concern of the professional man.

Finally, it would seem wise to leave instructions in the retiring doctor's Will as to where the records are stored and as to the method of disposing of them. The Will should direct the Executor of the estate to release the medical records to other physicians upon proper consent from the patient. It should instruct the Executor to hold all of the medical records until the administration of the estate is completed at which point the Executor probably would be safe in destroying records not previously requested by patients.

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Prepared at the request of The Medical Association of Georgia. Mr. Moore is a member of the firm of Alston, Miller & Gaines, General Counsel to The Medical Association of Georgia.

PROTECTION AGAINST DISEASE DEEMED MORE IMPORTANT THAN CRITICISM OF DOCTORS AND DRUGS

Flagrant touting of distortion and untruth often has relegated the physician from a position of honor and respect to one of suspicion and distrust, a leading spokesman for the pharmaceutical industry said in Albany, New York, recently.

Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association of Washington, D. C., made the statement in a speech at the 125th Anniversary Convocation of the Albany Medical Center.

In outlining the accomplishments of health teams working together, Dr. Smith suggested a Hippocratic oath type policy which drug manufacturers and physicians should follow in the use of drugs.

On the subject of distortion, Dr. Smih said criticism of doctors and the drug industry sometimes is so sweeping that "one wonders if the critic is deliberately ignoring facts."

Despite the availability of information on all facets of the public's health, he added, it is ignored at times.

"Particularly," Dr. Smith said, "by those who wish to achieve certain personal or philosophical objectives through ignoring or misrepresenting the truth.

"Unfortunately, this flagrant touting of distortion and untruth has its effect. The physician, long hailed as a healer, personal confidant and community leader, is now often regarded with suspicion and distrust.

"And the drug manufacturer, praised heretofore as the beneficient source of life-saving, health-giving miracles, now stands accused of wilfully dispensing dangerous and worthless medicine and making unconscionable profits at the expense of the ill and elderly.

"Some public officials and others seem to have become more concerned about protecting the people against drugs and physicians than against disease," Dr. Smith claimed.

He pledged the continuing help of the pharmaceutical industry in working with its natural allies in the health field, with businessmen, with legislative leaders and others.

He said the industry will defend what it believes to be in the best interest of the nation and mankind and will loudly and publicly try to expose fraudulent and deceptive statements "by those who put selfish aims, political or otherwise, ahead of truth and continuation of the medical leadership that this country has achieved in handling of drugs, Dr. Smith said:

"The pharmaceutical industry should contribute the tools needed in the health field and should offer them with the necessary information and assurances that can reasonably be expected to those who by training, experience and intelligence will use such tools for the betterment of man's welfare. The industry should be expected to respect laws and regulations but it should not be confronted with the unreasonable or unexpected any more than it should have a license to deceive and defraud.

"A member of the medical profession should expect and should receive useful aids to pursue his professional life and should be provided with sound factual information concerning their use. He should have the choice of drugs, and other medical aids, the knowledge of his patients' needs dictate for use, and he should have the primary responsibility of educating his colleagues concerning the use of health tools in his area of competence."

IS THERE A DOCTOR IN THE HOUSE?

The upcoming 1965 term of the Georgia General Assembly will have in its membership five doctors elected to the House of Representatives this Fall. This is a modern record for the number of physician-legislators elected to serve at the State House during a given term of the General Assembly.

All democrats, these State Representatives are: Drs. Grady N. Coker, Canton; John W. Acree, Hiawassee; A. Sidney Johnson, Elberton; Frank P. Holder, Jr., Eastman; and, Carl Savage, Jr., Montezuma.

Drs. Coker, Acree and Johnson were nominated in the Democrat primary and were thus assured of election in the absence of Republican opposition in the General Election. Drs. Holder and Savage were required to win their post in a Democrat run-off election held two weeks following their campaign in the Democrat primary.

The General Assembly convenes its regular 1965 term on January 11th.

PREVENTION OF MENTAL ILLNESS IN CHILDREN

Bernard C. Holland, M.D., *Atlanta*

One of the most important groups in whom we need to prevent mental illness is children.

A simple way of describing an emotional problem in a child is to say that the child is not able to do what another child his same age has been able to do. For example, some times at age eight a child cannot get along with other children aged eight. He has so much conflict that all other children eight years old avoid this child. He is not invited to parties; he has no playmates. The child has failed to solve the problem of how to relate to other children, how to play with other children. Another child may have incessant conflict with brothers and sisters, another severe conflict with mother and father, and be a discipline problem. Some children may become so submissive and withdrawn that they do not have a meaningful relationship to any other children or to their mother and father. Many children, despite good intelligence, fail to learn reading, math, etc. They have an emotional block to learning. These are some of the common failures which we see in children.

Attempt To Solve

The child must attempt to solve his emotional problem, and there are many people who can help him with his problem. His parents, his school teachers, his physicians, his friends and, if need be, a psychiatrist.

There are several common misconceptions about teaching and learning related to the successful or unsuccessful solving of emotional problems by children. Overemphasis on talent fails to give credit to the child for many hours of practice. The process of learning requires much more time than is generally appreciated, especially the process of learning to relate to other people. The progress of learning is not steadily upward but is marked by a curve of ups and downs. These fluctuations give rise to highly emotional responses in children and must be counter-balanced by emotional support from parents and teachers. The child learns from the material on which he is practicing and not from the teacher. The teacher regulates for the child, the pace, intensity, and duration of practice and effort. The teacher, along with the parents, relates learning with realistic goals and gives adequate emotional support during this process.

Obstacles

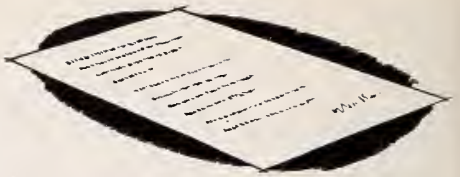
The learning process is frought with obstacles. A child does not want to admit that he does not know. This establishes unhealthy fear responses when this lack of knowledge is exposed or there is a threat of exposure by the teacher or parents. This process especially pertains as children learn to relate to other children and people in their environment. Another obstacle arises from learning mechanically. There must be an awareness of the meaning for learning. This requires concentration and healthy management of related feelings on the part of the child.

Emotional problems are common to all children. Helping children to be aware of their emotional responses and then give them sound guidelines for adequate management of their feelings is the primary function of teachers and parents. This is a tedious, time-consuming process but one that starts children on the road to maturity. Rewards will follow.

Emory University Hospital

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

ABSTRACTS BY GEORGIA AUTHORS



Bryant, Milton F., M.D., 384 Peachtree Street, N.E., Atlanta 8, Georgia, "A New Method of Preventing Postoperative Thrombosis in Small Arteries," South M.J. 57:391394 (March) 64.

In recent years there has been an increased awareness of the difficulties and failures encountered in removing atherosclerotic obstructions from small arteries. The immediate failure following operations on small vessels may be related to several factors such as inadequate runoff, errors in technique which produce luminal distortion and narrowing, and most commonly the development of occlusive thrombosis at the operative site. Various methods of preventing postoperative thrombosis in small arteries have been suggested. In spite of the fact that on occasion these methods may be helpful, it is generally agreed that the problem of preventing postoperative thrombosis in arteries less than four millimeters in diameter is unsolved.

The clinical value of any agent is frequently difficult to establish and one must turn to the laboratory for critical study. Using a standardized experimental preparation in the dog, clinical dextran has been shown to be of value in preventing thrombosis in traumatized arteries. Dextran of low and high average molecular weights are not as effective as clinical dextran in preventing postoperative thrombosis in small arteries.

A one per cent infusion of clinical dextran is helpful in preventing thrombosis following operations on small vessels. The antithrombotic properties of dextran are apparently useful in preventing postoperative thromboembolism and may be of help in treating established thrombophlebitis.

Feldman, Roger A., M.D.; Alfonso H. Holquin, M.D.; and Henry Gelfand, M.D., C. D. C., 1600 Clifton Road, N.E., Atlanta 22, Georgia, "Oral Poliovirus Vaccination in Children: A Study Suggesting Enterovirus Interference," Pediat. 33.526-533 (April) 64.

Monovalent oral poliovirus vaccine type 1 was fed to two groups of Atlanta children comparable in all respects except that in one group there was a high rate of naturally-occurring infections with Coxsackie B4 and poliovirus type 3. Approximately 30 per cent of the children in the latter group were found to have "wild" enteroviral infections during the two-week period beginning with vaccine feeding, and 38 of 128 of them (30%) who were "serologically susceptible' failed to show serologic evidence of vaccine 'take' eight weeks after vaccination. In the other groups, with no documented "wild' enteroviral infections during the two-week period, only three of 70 susceptibles (4%) failed to show a serologic response. This difference was attributed to the interfering effect of concurrent enterovirus infection on infection (and successful vaccination) with the OPV strain.

Community wide vaccination programs scheduled in the cold months of the year should avoid the possibility of enterovirus interference.

Jacklin, Harold N., M.D., 80 Butler Street, S.E., Atlanta 3, Georgia, "Familial Predisposition to Pterygium Formation," Am. J. Ophthal. 57:481-482 (March) 64.

Pterygium is a triangular fold of fibromembranous or fibrovascular scleroconjunctival tissue which may invade the cornea. The etiology and pathogenesis of pterygium formation remain unsettled. Neoplastic, degenerative, and inflammatory conditions, and exposure to dust, glare, high temperature, and ultraviolet light have been considered as etiologic factors. A familial predisposition to pterygium formation has been reported infrequently. In the family reported, six members from three generations were found to have pterygiums. These members of varied ages and occupations lived in rural and urban Georgia. The inheritance pattern appeared to be autosomal dominant which is in agreement with other reported cases.

Rieser, Charles, M.D. and Thomas L. Griffin, M.D., Box 459, Emory University Station, Atlanta 22, Georgia, "Cysts of the Prostate," P. Urol. 91:282-286 (March) 64.

The embryologic development of the seminal vesicles, the ampullae, the ejaculatory ducts and the prostate is complex and set in close anatomic contiguity. Even so, anomalous distortion of these structures is quite rare. When cystic aberrations of the internal genitalia occur the clinical features are perplexing and overlapping.

In summary, Mullerian duct cysts are midline, large, fluid content does not contain spermatozoa, and seminal vesicles, testes and epididymides are intact.

Cysts of the seminal vesicle are located to one side of the midline and if testis is intact the cyst fluid contains spermotazoa, the ipsolateral epididymis is enlarged, and whereas the vesiculogram is normal on the uninvolved side, it is absent on the involved side.

Diverticula of the ejaculatory duct produces enlargement of corresponding epididymis and are laterally located. Radiographically the vessels are intact and the fluid or cyst contains spermatozoa.

Prostatic cysts are lateral, small with bilateral normal testes and epididymides. Spermatozoa are absent from cyst fluid. Seminal vesiculograms are normal, but the course of the ejaculatory ducts is modified in a curvilinear manner. The paper presents in detail a true retention cyst of the prostate two and one half cm. in diameter in a man of 21 years.

Carter. William F., M.D.; Guy L. Faucher, M.D., and Robert B. Greenblatt, M.D., Medical College of Georgia, Augusta, Georgia, "Evaluation of a New Progestational Agents, 6,17 dimethyl-6-dehydro-progesterone," Am. J. Obst. and Gynec. 89:635-641 (July) 64.

A new progestational agent was evaluated clinically. It was found effective in controlling dysfunctional uterine bleeding, particularly in combination with an estrogen. Doses up to 35 mg. per day were employed. Menses were induced in women with amenorrhea in over 95 per cent of the trials when five mg. was given for five days. In the delay of menses test, ten mg. with 0.1 mg. of ethinyl estradiol-3-methyl ether appeared to be adequate. Pseudopregnancy was maintained for as long as 83 days of therapy. Ten to 35 mg. was given per day. Longer periods were not tried. Mild breakthrough spotting was controlled by the addition of an estrogen or by increase of the dose of the progestin. The progestin was demonstrated to be thermogenic. Endometrial studies performed following therapy showed progestational endometrial changes except in one patient with endometrial carcinoma and here the endometrium was essentially unchanged. No androgenic or estrogenic properties were noted and no significant untoward effects were observed in patients receiving 6,17 -dimethyl-6-dehydro-progesterone. This progestational agent had no suppressive effect on adrenal function.

Ellison, Lois T., M.D.; Robert G. Ellison, M.D.; Curtis H. Carter, M.D.; Duren Daniell, Jr., M.D., and Victor A. Moore, Jr., M.D., Medical College of Georgia, Augusta, Georgia, "The Role of Hypercapnia and Hypoxia in the Etiology of Peptic Ulceration in Patients with Chronic Obstructive Pulmonary Emphysema," Am. Dev. Res.. Dis. 89:909-916 (June) 64.

The present study was carried out to determine the significance of hypercapnia and hypoxia as a cause for the increased incidence of peptic ulceration in chronic obstructive pulmonary emphysema.

Although basal gastric secretion in emphysema patients was not significantly different from that in the controls, the maximal acid output was significantly higher. Gastric secretion was shown to increase in response to elevation of blood carbon dioxide and to decrease when hypoxia was corrected. It is concluded that both hypercapnia and hypoxia stimulate gastric secretion and, acting in combination. produce a greater response than hypoxia occurring alone.

Patients with obstructive emphysema are regularly subjected to periods of increased carbon dioxide and decreased oxygen saturation. It is believed that gastric acidity is increased during these periods and that this stimulus may be responsible for the development of peptic ulcers in susceptible persons.

Bryant, Milton F., M.D., Walter L. Bloom, M.D., and Spencer S. Brewer, M.D., 384

Peachtree Street, N.E., Atlanta 8 ,Georgia, "Study of the Anti-thrombotic Properties of Dextrans of Large Molecular Weight," J. Cardiovasc. Surg. 5:48-52 (Jan.-Feb.) 64.

A continued search for an effective method of preventing postoperative thrombosis in small arteries has been carried out in this laboratory (Ferst Research Laboratory, Piedmont Hospital) during the past two years. Heparin and two fibrinolytic enzyme preparations were found to be only partially effective and impractical to use. Our studies have been reported indicating that an infusion of clinical dextran (6 per cent solution of MW 75,000) in quantities equal to one per cent of body weight is responsible for the prevention of postoperative thrombosis in small arteries. Dextrans of low molecular weight are not as effective as clinical dextran in preventing thrombosis in arteries following a standardized mechanical trauma. Since dextrans of MW 75,000 and less are quantitatively removed from the intravascular compartment in a matter of a few hours it was felt that study of the antithrombotic properties of dextrans with average molecular weights larger than the albumin molecule might add to our understanding of the protective effect observed.

The anti-thrombotic properties of dextrans with high average molecular weights have been evaluated using a standardized experimental preparation that has a known post-traumatic thrombotic rate of 95 per cent. In 93 preparations treated with dextrans of large average molecular weights, the thrombotic rate was reduced to 59 per cent. This compares with a thrombotic rate of only ten per cent with clinical dextran. These studies suggest that clinical dextran is superior to dextrans of higher molecular weights in preventing thrombosis in small arteries of dogs subjected to a standardized surgical trauma.

Zuspan, Frederick P., M.D.; George H. Nelson, M.D.; and Raymond Ahlquist, Ph.D., Medical College of Georgia, Augusta, Georgia, (with the technical assistance of Natalie Lipko, R.N., B.S., and Anne Thompson), "Epinephrine Infusions in Normal and Toxemic Pregnancy", Am. J. Obst. & Gynec. 90:88-98 (Sept.)64.

Twenty pregnant patients at term were divided into control and toxemic groups and were infused with varying amounts of epinephrine (0.06, 0.12, and 0.24 micrograms per kilograms per minute). Further breakdown of the studied patients revealed seven control patients, nine pre-eclamptic patients (untreated), two patients with hypertensive cardiovascular disease with superimposed pre-eclampsia and two patients with essential vascular hypertension. All patients were between 38 and 40 weeks of gestation. Base line studies were done on patients which included fetal heart rate, pulse rate, blood pressure, and blood samples for determination of nonesterified fatty acids (NEFA). After controlled samples and base line studies were obtained, an infusion of epinephrine, delivered by an Harvard infusion pump, was begun at a rate of 0.06 micrograms per kilograms per minute. The dose of the catecholamine was doubled after 20 minutes of infusion.

No significant difference was noted in the NEFA response to epinephrine in the groups studied. The NEFA response from a base line level of approximately 800 micro equivalents per liter rose to 1500 micro equivalents per liter at the highest and lowest infusion rate. Changes in fetal heart rate were not discernible during this study. The greatest pressure response was seen in the two patients who had essential vascular hypertension with superimposed pre-eclampsia. It is proposed that possibly an epinephrine infusion might be helpful for the clinical differentiation of essential vascular hypertension and hypertensive cardiovascular disease with superimposed pre-eclampsia.

Anabtaw, Isam N., M.D.; Edwin L. Brackney, M.D.; and Robert G. Ellison, M.D., Medical College of Georgia, Augusta, Georgia, "Carcinoma of the Esophagus Treated By Combined Radiation and Surgery", J. Thoracic Surg. 48:205-210 (Aug.) 64.

Sixty-three consecutive patients with carcinoma of the esophagus treated at the Eugene Talmadge Memorial Hospital are reviewed. A program of therapy consisting of supervoltage radiation followed by retrosternal transposition of the esophagus and total esophagectomy performed in two stages is described. This program has several advantages: (1) It permits a better understanding of what constitutes a hopeful cure and what is obviously a palliative case. (2) High voltage radiation causes marked regression of tumor, destruction of small lymphatic foci, and, in some cases, eradication of the neoplasm. (3) Total esophagectory insures against recurrence in the unexcised specimen and the removal of areas liable to be missed by radiation. Eighteen patients received supervoltage radiation in preparation for surgery, but only 12 were candidates for surgical treatment. Three patients are living and well four, ten, and sixteen months after surgery. In two of 17 patients supervoltage radiation was effective in eradicating all gross and microscopic evidence of neoplasm. Although no definite conclusions could be drawn from this series, the authors have been encouraged with this line of therapy and wish to recommend it.

Fox, Vernelle, M.D., 1260 Briarcliff Road, N.E., Atlanta, Georgia, "The Dynamics of Alcoholism", South M.J. 57-914-916 (Aug.) 64.

Addictive drinking is not a symptom of an illness, but the patient's defense against the symptoms. We are inclined to lose sight of the real problem because of our concern with the drinking.

The patient's real illness—isolation, lack of adequate self-image and identity, lack of sense of personal worth, and lack of ability to form adequate and satisfactory relationships with his fellow man is of such a nature that he feels compelled to perpetuate this pattern of having you see his drinking behavior rather than see his even more frightening illness.

The physician has two responsibilities to this patient; first, the adequate management of the patient's medical problems, including withdrawal symptoms; second, a *real* acceptance of the fact that this is a totally sick person, drunk or sober, who needs patient guidance to resources such as psychotherapy, clinics, and AA, which are designed to help him break out of his isolation and establish meaningful relationships.

Talledo, Eduardo, M.D.; S. F. Adams, M.S., and F. P. Zuspan, M.D., Medical College of Georgia, Augusta, Georgia, 'Response of Pregnant Uterus to Intranasal Oxytocin", J.A.M.A. 189: 348-350 (Aug.) 64.

The uterine response to intranasal oxytocin, as measured by changes in the amniotic fluid pressure was studied in 15 pregnant patients at term. Each patient served as her own control for uterine activity and drug response. According to the uterine response, the patients were grouped in three categories: 1—no response detectable 2—marked response 3—heterogenous (different gradations of uterine activity). The absorption from the nasal mucosa could be reproduced, for the most part, by an intravenous infusion of 2mU/minute; however, instances in which the absorption was comparable to infusions of ten and 20mU/minute were also encountered. The unpredictability of absorption of the drug from the nasal mucosa was the main feature encountered which contrasted with a more predictable and reproducible response obtained by the intravenous route. It is this finding that makes the use of the intranasal route relatively unsafe in the pregnant patient. If the obstetrician elects its use, half-minim in each nostril should be given in an incremental fashion. The patient should be observed the same as when dilute solution of oxytocin is given intravenously.

Norden, Carl W., M.D. and Thomas F. Sellers, Jr., M.D., C.D.C. Public Health Service, 1600 Clifton Road, N.E., Atlanta, Georgia, "Hemophilus Influenzae Pyarthrosis in An Adult", J.A.M.A. 189:694-695 (Aug. 31) 64.

A 43-year-old woman with chronic rheumatoid arthritis survived septicemia, meningitis, and pyarthrosis due to *Hemophilus influenzae*. Diagnosis of the correct etiologic agent may be delayed because the clinician rarely considers *H. influenzae* a potential pathogen in adults and because of the pleomorphic nature of the organism on gram stain.

There is a significantly higher incidence of suppurative arthritis in patients with rheumatoid arthritis than in the general population. No relationship has been demonstrated between sepsis and preceding treatment with corticosteroids. Septic arthritis should be considered in any patient with rheumatoid arthritis in whom there is sudden deterioration or unexplained fever. The most useful diagnostic procedure is aspiration of the involved joint, with gram stain and cultures of the fluid. Antibiotic therapy should be based on results of the culture; local incision and drainage may have to be instituted to remove localized collections of purulent material.

THE ASSOCIATION

DEATHS

Following an extended illness, ELLIS ROBERT MAY of Lincolnton, brother of C. J. May of Washington, died August 23rd in Milledgeville. Dr. May had practiced medicine for more than 50 years.

Born in Lincoln County 83 years ago, Dr. May was a graduate of the Georgia Medical College and a member of the Richmond County Medical Society and the Medical Association of Georgia. Dr. May was medical advisor for the Selective Service Board of Lincoln County and was instrumental in establishing the Lincoln County Health Department. He received his 50-year medical pin in 1954.

Dr. May had practiced for more than half a century in the Lincoln County area, and was a past mayor and councilman of Lincolnton and a member of the Lincolnton Masonic Lodge No. 345, from which he received his 50-year pin in 1960.

Surviving are his wife, Mrs. Mabel Groves May, of Lincolnton; two daughters, Mrs. Camille M. Lane, Millen, Ga., and Miss Charlotte May, Augusta; two sons, Charles H. May, of Tallahassee, Fla., and Joe C. May, of Wilmington, N. C.; one brother, Dr. C. J. May, Washington; a sister-in-law, Mrs. Curry May, of Lincolnton; and five grandchildren.

JOHN ERNEST POWELL, SR., Villa Rica, passed away suddenly September 8, 1964. He was born in Carroll County, July 18, 1892. He graduated from Emory University School of Medicine in 1915 and entered practice in Villa Rica. He was a member of Villa Rica Methodist Church and was on the official Board for many years. He was a Shriner, former member of the Civitans and Kiwanis Clubs, member of Carroll-Douglas-Haralson County Medical Society, Medical Association of Georgia, American Medical Association, Society of Southern Railway Surgeons, and Medical Director of Villa Rica City Hospital.

He is survived by his wife, the former Miss Pauline Pope, one daughter, Mrs. David Paris; one son, Dr. J. E. Powell, Jr., and five grandchildren.

SOCIETIES

COWETA COUNTY MEDICAL SOCIETY has recently finished its fifth year of voluntary assistance to Korea by shipping 21 cases of drugs valued above $600,000 and weighing 11,860 pounds. Project Chairman, Ben Jenkins, M.D., reported that the society's efforts resulted in medicine reaching 50,000 needy patients in Korea in 1963. The drugs are donated by pharmaceutical companies and are crated and handled in Newnan for shipment to Korea.

DeKALB COUNTY MEDICAL SOCIETY in conjunction with Decatur Federal Savings and Loan Association began a series October 6, entitled, Family Medical Forum. The subject for the first session was "The Common Cold." The forums will continue through the Fall.

Sir George Pickering, regius professor of medicine at Oxford, England, was the guest speaker at a meeting of the FULTON COUNTY MEDICAL SOCIETY September 24. Dr. Pickering, who served as the President of the British Medical Association for 1963-64, spoke on "The Pathogenesis of Arteriosclerosis." Earlier the same week he had spoken at the annual meeting of the Georgia Heart Association in Augusta.

STEPHENS COUNTY MEDICAL SOCIETY played host to the NINTH DISTRICT MEDICAL SOCIETY at their semi-annual Fall meeting held September 23, in Toccoa. The program was sponsored in part by the Stephens County Chapter of the Georgia Association of Mental Health, and Hart Laboratories, Winston-Salem, N.C. Elton L. Copeland, M.D. served as Program Chairman. The participating faculty and their topics included: E. James McCranie, M.D., "Psychogenic Somatic Symptoms;" John Kemble, M.D., "Differential Diagnosis of Functional and Organic Signs and Symptoms;" Bob Maughon, M.D., "Psychogenic Pain and Illustrative Case Presentations;" Gerald Burroughs, M.D., "Psychophysiological Reactions;" George Longley, M.D., "Organic Brain Syndromes;" and Julius Johnson, M.D., "Use of Drugs in Treatment of Emotional Problems." All members of the participating faculty are members of the Departments of Psychiatry and of Neurology at the Medical College of Georgia, Augusta. Panel discussions followed the papers. Later a business meeting and then a social hour were held for members of the society and their wives.

The quarterly meeting of the THOMAS-BROOKS COUNTY MEDICAL SOCIETY was held September 24, at Archbold Memorial Hospital, Thomasville. The program was presented by William Thomas, Jr., M.D., who spoke on "Etiological Factors in Kidney Stone Formation," and Richard Schmidt, M.D., whose topic was "Headaches." Both doctors are members of the School of Medicine, University of Florida. A refreshment hour and dinner followed the program.

PERSONALS

Approximately 1,125 surgeons were inducted in Chicago, October 8, 1964, as new Fellows of the American College of Surgeons in cap-and-gown ceremonies during the annual five-day Clinical Congress of the world's largest organization of surgeons.

Those receiving this distinction from the State of Georgia at the 1964 Convocation are as follows:

Atlanta
Charles P. Adams
Edgar O. Rand

Dublin
George E. Tanner

Atlanta
Lea Richmond
Robert R. Smith
Clinton E. Warner
R. Warner Wood, Jr.
Gerald T. Zwiren

Augusta
Ernest F. Daniel
Arthur L. Humphries, Jr.

Decatur
H. Duane Blair

Marietta
Frederick K. Schmidt

Valdosta
David L. Branch, Jr.

First District

LEILA CALHOUN DEASY, formerly of Claxton, worked in Augusta with CURTIS G. HAMES on his heart research project. Dr. Deasy, who is associate professor and director of research at the School of Social Work at the Catholic University of America in Washington, D.C. has for many years been engaged in social and psychological factors related to illness.

Second District

General Practitioner, BLAKE FOSTER, opened his office September 8 in the Williams Dental-Medical Arts Building in Douglas, Georgia. The offices were formerly occupied by the late ROY JOHNSON.

Blakely has a new doctor, FRANKLIN EUGENE MERCER, who will practice general medicine and surgery with W. McCALL CALHOUN. He opened his office September 8.

Although he retired recently, due to health, A. B. JONES, JR., still holds the title of Chief of Medical Staff in Brooks County Hospital at the insistence of his fellow physicians.

In appreciation of his 28 years service as a member of the medical staff of the Brooks County Hospital, members of the Board of Trustees and hospital personnel surprised him with an informal reception in the hospital lounge. At this time they presented Dr. Jones with a handsome engraved silver service. The silver service was engraved "Presented to Dr. A. B. Jones, Jr. in appreciation of your long and devoted services as a charter member of the medical staff of Brooks County Hospital."

JACK STANDIFER, Blakely, has recently completed 50 years of continuous service with the U.S. Weather Bureau as a Cooperative Observer at Blakely.

Fifth District

"Apathy of Empathy" was the theme of the September 4 meeting of the Woman's Auxiliary to the Fulton County Medical Society at which ADDISON DUVAL, Director of the Mental Health Division of the Georgia Department of Public Health, was guest speaker.

Serving on the panels offered in October by the DeKalb County Medical Society in conjunction with Decatur Federal Savings and Loan Association were several DeKalb County physicians. The first of the Family Medical Forums, presented October 6 on "The Common Cold," included DAVID MORGAN, RICHARD PARSONS, LUTHER VINTON, and ROBERT HUBBELL. Moderator was Z. V. MORGAN. October 13's subject on "Teenagers, Automobiles and Accidents," was moderated by HERBERT GIRARDEAU, and was discussed by DUANE BLAIR, ELLIS KEENER, EDGAR HOWELL, and FRANK MORGAN. On October 20 the topic was "Heart and Circulatory System." The panel for this session consisted of BEN OKEL, HOMER ALLEN, NED UEHLING, and KAY EDWARDS, and was moderated by FLOYD SANDERS. The Medical Forum was completed on October 27 with a discussion of "Cancer Today," moderated by ANGIER WILLS, whose panel was composed of RICHARD SMOOT, CHESTER MORSE, JAMES ROGERS, and ROBERT FINE. The forum was free to the public.

BRUCE LOGUE, Atlanta, recently addressed the Forsyth County Heart Association, Winston-Salem, N.C. The titles of his talks were, "Recent Advances in the Management of Cardiac Arrhythmia and Heart Block," and "The Preoperative Evaluation and the Safe Conduct of the Cardiac Through Surgery."

DR. SIDNEY OLANSKY traveled to Jacksonville, Florida, on September 26, 1964, to participate in a post-graduate seminar sponsored by the Duval County Medical Society. He gave two one-hour talks, one on "The Diagnosis and Management of Superficial Fungus Infections," and the second on "Pediatric Dermatology." In addition, he conducted grand rounds at the Duval County Health Center on Monday, September 28, 1964.

Included among the 50 reports of progress in radiology made to the convention of the American Roentgen Ray Society, September 29-October 2 at Minneapolis was a paper "Anatomic Localization of Midline Echo in Sonograms of the Brain" by J. R. BRYLSKI and J. L. IZENSTARK, Emory University School of Medicine, Atlanta. Other doctors presenting a paper at the meeting from Atlanta were R. S. FOSTER, W. H. SHUFORD, E. P. TUTTLE and H. S. WEEMS. Their paper was entitled "Selective Renal Arteriography in Medical Diseases of the Kidney."

Six Atlanta physicians participated in a panel discussion on "Current Concepts in Allergy," at the meeting of the Fulton County Medical Society, Academy of Medicine, Atlanta, in September. CHENEY C. SIGMAN was moderator, and the panel consisted of LAMAR B. PEACOCK, MARIAN F. OLANSKY, MASON I. LOWANCE, OLIN G. SHIVERS and CARL C. JONES, JR.

ALFRED A. MESSER, Atlanta, addressed the September meeting of the Cobb County Medical Society on "Marriage Therapy." In June, Dr. Messer led a three day institute on family treatment at the annual meeting of the Child Welfare League of America in Miami Beach.

Seventh District

HOWARD M. SIGAL, Smyrna pediatrician, was named "Citizen of the Year" by the 8 O'Clock Civitan Club. Dr. Sigal was honored at the installation night ceremonies held recently.

Eighth District

RONALD JACK BOYD, Alma, announced the opening of offices for the general practice of medicine September 25, at Beal Drug Store in the suite of offices formerly occupied by the late W. W. SHARPE.

JOSEPH M. JACKSON and C. H. HARPER, Folkston, announced in September the association of CHARLES N. CANNON with them in their medical practice.

A native of Waycross, THOMAS J. FERRELL, JR., opened offices at 202 Folks Street, for the practice of medicine. Dr. Farrell is the son of T. J. FERRELL.

PAUL L. MAHONEY, JR. became an associate of St. Mary's Clinic, St. Mary's, October 1.

Tenth District

Athens physician, BOLLING S. DuBOSE, JR. received a silver meritorious service medallion from HUDDIE L. CHENEY, Thomasville, representing the Georgia Heart Association. Dr. DuBose, and GOODLOE Y. ERWIN, Athens, and J. B. NEIGHBORS, Athens, who both received gold medallions, were awarded for recognition of more than ten years and more than 15 years service, respectively, given through the Athens Heart Clinic. Also recognized for their services were GEORGE ERWIN and JOHN F. STEGEMAN, both of Athens.

The Medical College of Georgia recently announced the appointment of GERALD H. HOLMAN as Chief of the Department of Pediatrics. He comes to Georgia from the University of Kansas Medical Center.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee/September 19, 1964

Received—Committee appointments:

(1) *Relative Value Study Subcommittee*—Henry Jennings, Gainesville.

(2) *Liaison Committee with Georgia State Nurses Association:* Charles R. Underwood, Marietta; J. Lamont Henry, Atlanta; Jack M. Levin, Atlanta; Thomas N. Lumsden, Clarksville; and Samuel E. Patton, Macon.

(3) *Georgia Advisory Council for Construction, Licensure and Indigent Care*—Pomeroy Nichols, Augusta, or Alternate, Neal Yeomans, Waycross.

(4) *MAG Appeal Board for Kerr-Mills Program*—John T. Dupree, Macon.

Recommended that an MAG representative be sent to the Second National Conference on Cardiovascular Diseases with funds to be taken from the Contingent Fund. Dr. Alexander was asked to contact Thomas L. Ross, Macon, regarding attendance as the representative.

Voted to appoint J. E. Scarborough and Thomas Q. Spitzer, Atlanta, to the committee to select the speaker for the Abner W. Calhoun Lectureship. Dr. A. Calhoun Witham will serve as chairman of the committee.

Received: Letter inquiring about pathologists contractural arrangements with hospitals. Recommended that inquirer be informed that MAG has no policy at present, that the problem will be investigated in the future, and that in the meantime, the pathologists should take the initiative for the investigation.

Received for information: (1) Dr. Mauldin had received a letter from the State Dept. of Family and Children Services stating that some aged, senile patients at Milledgeville should be in nursing homes. Executive Committee recommended that a letter be written to the Family and Children Services suggesting the information of an ad hoc committee to work with the Dept. in solving the problem.

(2) Re: Repackaging Houses—Executive Committee recommended that a copy of the MAG Judicial Council reply be mailed to all inquiring members, with the statement that the physician should make his own decision as to what he wishes to do; also recommended that a letter be written to the AMA Judicial Council asking for guidelines.

Voted to recommend to Council that the AMA-MAG Statewide Advertising Campaign to disseminate information about health care for the aged to the public be carried out with the funds of the Public Service Board supplemented from the Contingent Fund if necessary.

Council/September 19-20, 1964

Received: Report from Dr. Bishop on the Public Service Board Activities—

(a) Conference for Medical Leaders of Georgia: The program is being formulated.

(b) Medicine and Religion: There is a Medicine and Religion Workshop to be held in Atlanta at St. Philips Cathedral.

(c) "Good Health for Georgia:" Radio public information program.

(d) AMA-MAG Statewide Advertising Campaign: The ad campaign to disseminate information about health care for the aged to the public was outlined.

Recommended: That Dr. J. Lee Walker, Nahunta, who spoke to Council about his concern for Georgia's lax marriage laws, work with the Legislative Committee to effect liaison with the Council of Churches.

Approved: Motion by Dr. Mauldin to pay $25 in dues to the Allied Medical Careers Club; funds to be taken from the Contingent Fund.

Voted: That Executive Committee should meet October 14, 1964, with the State Board of Health, at the Heart of Atlanta; voted that Ex. Comm. extend an invitation to Council and Public Health Subcommittee members to attend if they so desire.

Received: Letter from Honorary Member Dr. Herman Jones, thanking MAG for the election to honorary membership.

Received: From Mr. Krueger, the proposed 1965 Annual Session Program; voted to authorize the program comm. to proceed with the new plan.

Report received: From Dr. McDaniel on the AMA Public Relations Conference he attended in Aug. in Chicago.

Received for information: New County Medical Society Constitution and By-laws—(1) Voted that such for Cook-Berrien County Medical Society be accepted and set up as a separate society; (2) Voted to table the matter of Barrow County forming its own medical society, as no reply had been received requesting submission of a Constitution and By-Laws; (3) Voted to inform the Jackson-Banks members to revise the Constitution and By-laws to exclude the Barrow members, if they formed their own society.

Voted to recommend that House of Delegates delegate authority to Council to approve the new District Societies (whose boundaries will be decided in compliance with the new Congressional Districts) as they are set up prior to the 1966 Annual Session.

Report received: Of the H. R. 11865 campaign—Dr. Walker and Mr. Richard Nelson.

Voted to approve the Voluntary Sterilization Bill for submission to the Legislative Committee.

Voted to allot $500 from the Contingent Fund for the use of MAG delegates for necessary functions at the AMA Miami Beach meeting.

Received: Letter from the Georgia Radiological Society thanking Council for its help in working to solve the problems of Hospital-Radiological relationships by adopting the "Guide for Hospital-Radiologist Relations" prepared by the Georgia Hospital-Medical Council.

Report received: From MAG Attorney, John Moore, regarding the conclusion of the Lee Optical Case, affirming the injunction that this was the corporate practice of medicine.

Suggested to Dr. Virgil Williams, head of the Disaster Medical Care Subcommittee, that his committee could be made active by receiving from each of the 10 district councilors the names of 10 doctors who would be willing to assist in civil defense, and that Dr. Williams contact General Hearn, civil defense head in Georgia, regarding manpower and communication.

Information received regarding Dr. Chambers question of the reelection of old district councilors who would then be in the inappropriate district according to the newly drawn lines. He was informed that this could not be resolved until House of Delegates action at the 1965 Annual Session.

Received for information: That a new advertising director for the State Medical Journal Advertising Bureau has been employed in behalf of state medical association journals.

Information: Mr. Richard Nelson urged consideration of a means to pass on information of AMA activities and meetings to all MAG members.

Physician-Lawyer Liaison/September 13, 1964

W. Bruce Schaefer, Chairman of the committee stated that it had been mutually agreed that the committee should be reactivated, hence the meeting. Received for information: letter written by Mr. Cummings to a physician requesting information on what may be considered confidential between doctor and patient, in which he had quoted the Hippocratic Oath. Committee thought that it should be published in *JMAG*, and it was so recommended.

There was general discussion regarding instances of noncooperation between attorneys and physicians and the following suggestions were made in an effort to improve this situation:

(1) That a physician and an attorney from each district be appointed to assist in settling any cases in which there was a lack of cooperation between the two professions.

(2) That a copy of the Interprofessional Code governing professional conduct between lawyers and physicians adopted by the Georgia Bar Association and the Medical Association of Georgia in 1957 be mailed to each newly licensed physician by the State Medical Examining Board; the same to apply for newly licensed attorneys.

(3) That certain sections of the above mentioned Interprofessional Code should be amended as follows:

(a) To provide that when a patient goes to a doctor for court purposes, arrangements should be made in advance with the doctor and an explanation of the details given him.

(b) To state that the doctor-patient relationship does not exist when a patient is examined for court purposes.

(c) To add a section to explain subpoenas.

It was agreed that each member of committee should study the Interprofessional Code and make recommendations for amendments and additions at the next meeting of the committee.

Subcommittee on Mental Health/September 13, 1964

A discussion was led by Dr. Stribling on the criteria of indigency for mental health patients. Questions were raised concerning physicians practicing in community mental health centers. The difference between medical indigency and mental health indigency was noted. Dr. Forster emphasized the necessity for liaison between the State Board of Health Mental Health Committee and MAG.

By general agreement it was approved that representatives from the State Board of Health, the State Department of Health, the MAG Subcommittee on Mental Health, the MAG Indigency Committee and the Georgia Psychiatric Association be gathered to discuss the criteria of certification of patients for treatment in community health centers. It was recommended that these representatives meet and make a recommendation for the consideration of the MAG Subcommittee on Mental Health, and in turn the Subcommittee would then make a report to the Council of such report to be forwarded to the State Board of Health for their consideration.

It was approved that Dr. James Brawner would seek the views on the questions of who will "man" mental health centers and how they will be reimbursed, from the Georgia Psychiatric Association, and that Dr. Massee would work with Dr. Stribling with the date from the Health Dept. Technical Committee, and it was recommended that the Chairman of the Mental Health Subcommittee then present recommendations on these questions to Council for referral and consideration by the State Board of Health. It was recommended that each of the districts activate the county medical society's committees on mental health in their districts. After Dr. Eugene Griffin's presentation, concerning the need for prevention of mental retardation in children, Dr. Stribling suggested that more impetus and investigation be given this problem. Each district representative reported on his district's activities in the field of mental health and Mrs. Smith reported on the Woman's Auxiliary activities. Dr. Brawner urged more support and publicity for broader health insurance underwriting to include mental illness. A discussion was held on the admittance of mental health patients to general hospitals, and a recommendation was made that Dr. Stribling resume all responsibility for the Mental Health Page in *JMAG*.

CHEST PHYSICIANS ANNOUNCE 1965 ESSAY CONTEST

The American College of Chest Physicians offers three cash awards to be given annually for the best essay prepared by undergraduate medical students on any phase of the diagnosis and/or treatment of chest diseases (heart or lungs).

The First Prize will be $500; Second Prize, $300 and Third Prize, $200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school.

Since these Essay Contests were initiated in 1950, cash prizes totaling more than $12,000 have been awarded to students in many parts of the world.

The winners will be announced at the 31st Annual Meeting of the American College of Chest Physicians, to be held in New York City, June 17-21, 1965.

The official application form, sample copies of the journal, and additional information may be secured by writing Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago, Illinois 60611, U.S.A.

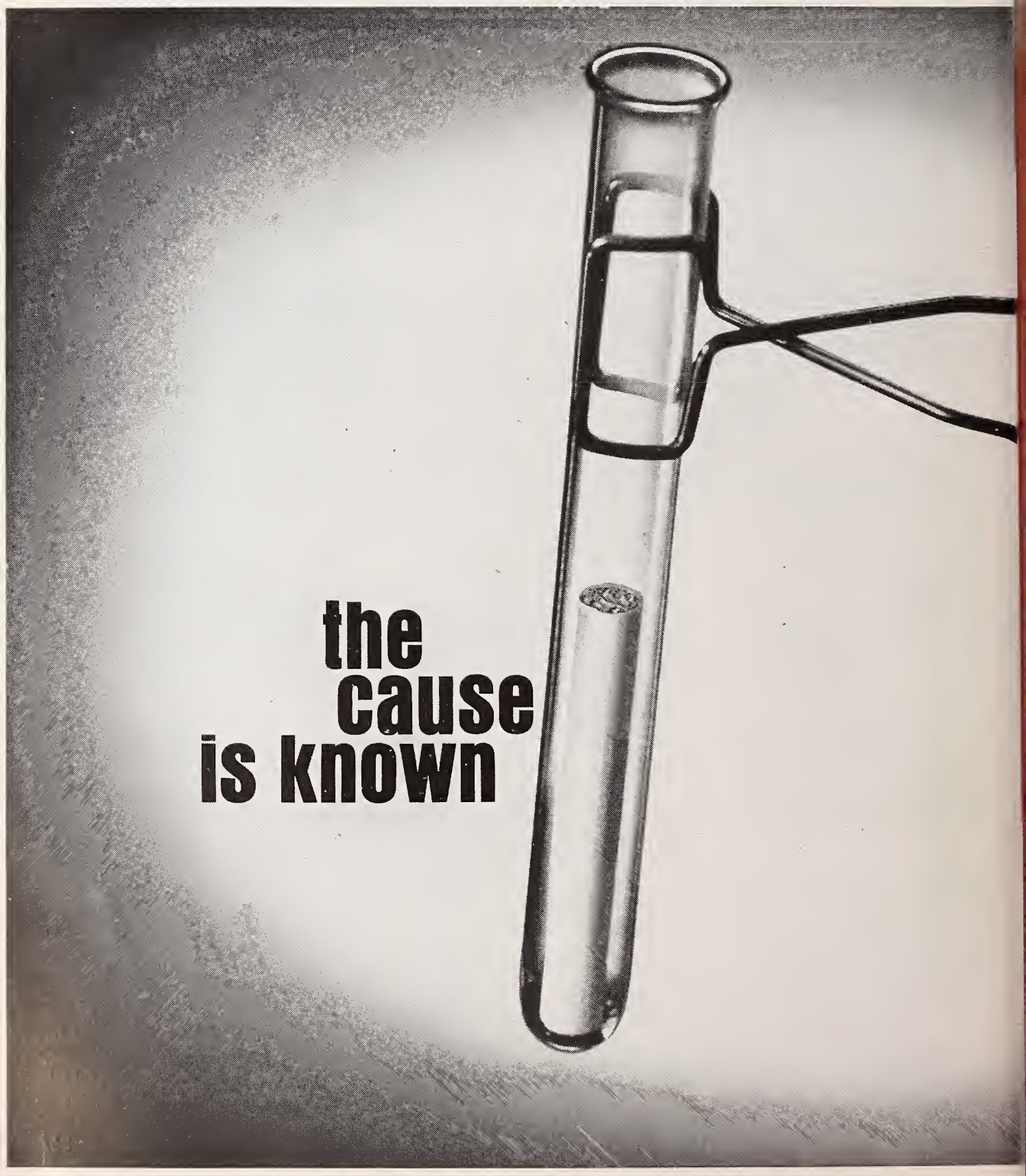
The big question has been answered for many people. The report of the Surgeon-General on Smoking and Health gave strong support to the overwhelming evidence accumulated by the American Cancer Society over the last 15 years. Cigarette smoking is a major cause of lung cancer.

As the evidence piled up, the Society intensified its public educational efforts, with teen-agers the specific target. Many private and government agencies were stimulated to take action.

But people have short memories. Already the message of the Surgeon-General's report has been blurred with the passage of time. Unless those with the responsibility for protecting health act vigorously, the public will continue to lose sight of the risk . . . and smoke cigarettes.

We are faced with some compelling questions. How to motivate adults to stop smoking cigarettes? How to influence teen-agers not to start? How to help those who want to stop but can't?

Between us, doctor, we must find the answers. **american cancer society**



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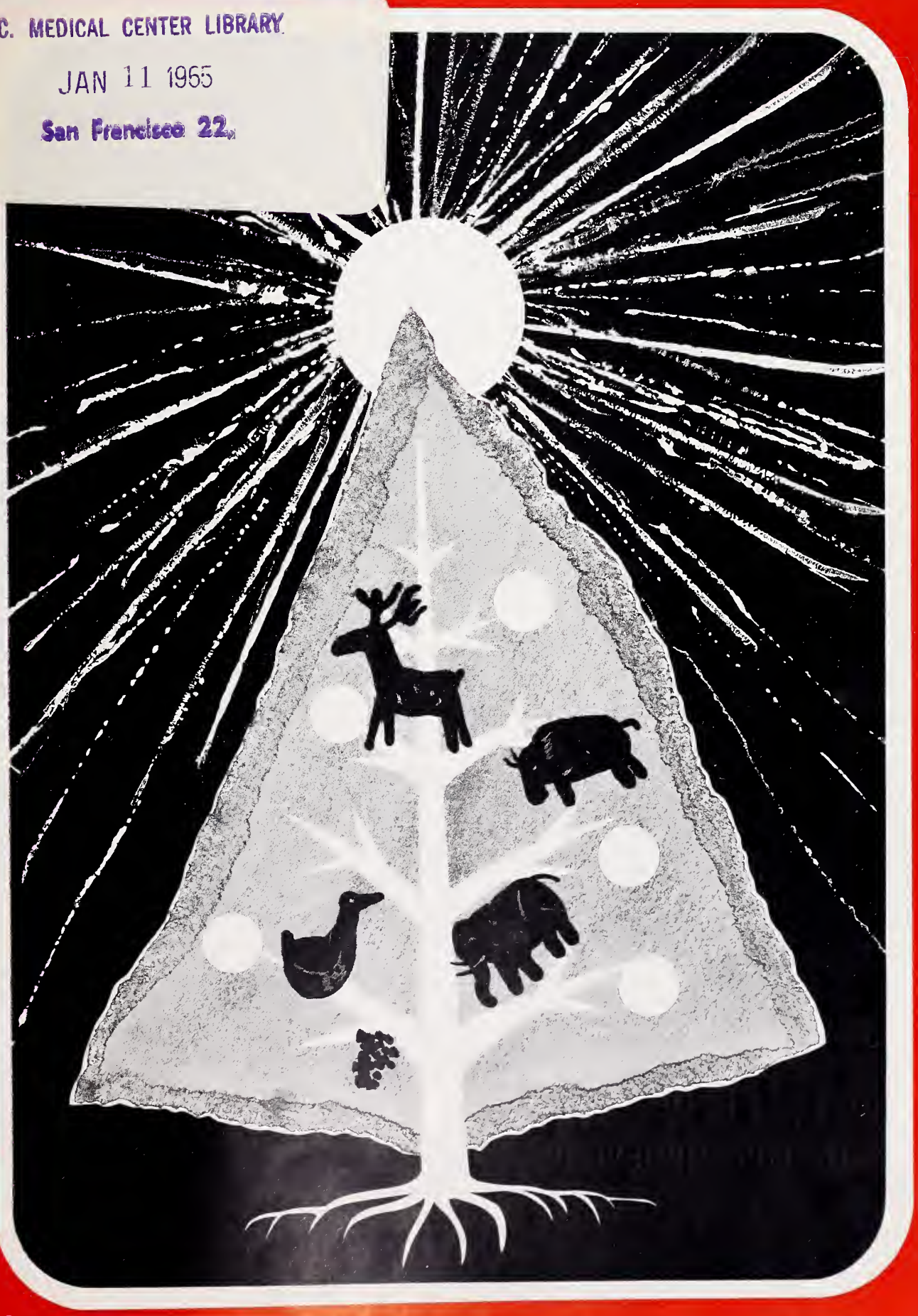

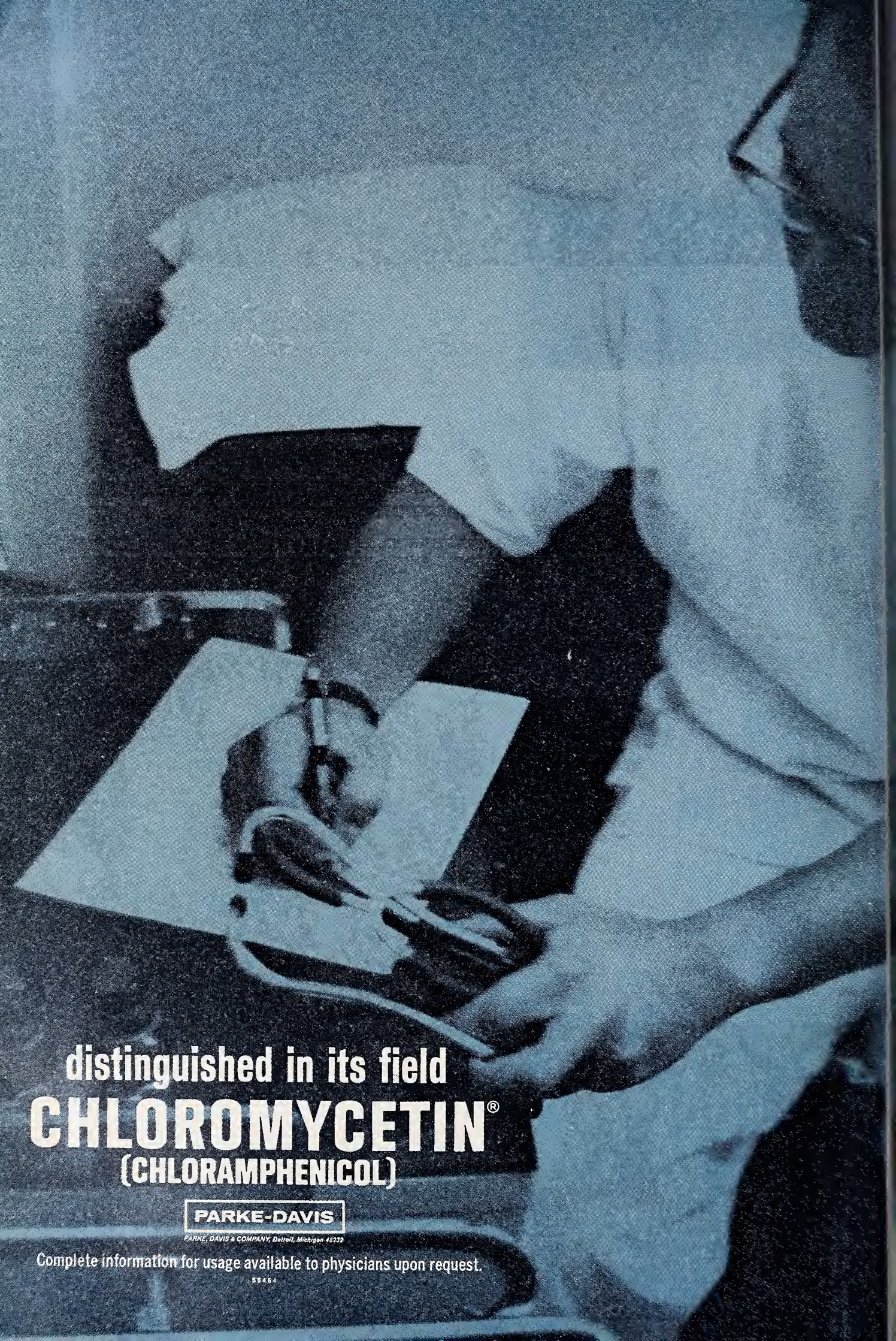
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JOURNAL OF THE MEDICAL ASSOCIATION Georgia

CLINICAL UTILIZATION OF LIVER BIOPSY AS A LIVER FUNCTION TEST

David E. Hein, M.D., *Atlanta*

■ ***This procedure compliments the chemical tests and has become a very necessary member of the diagnostic team.***

IN A BROAD SENSE one should consider biopsy of the liver a liver function test, insofar as the "function" pertains to the clinical state of the liver in its overall ability to perform. Ever since the publication of Iverson and Roholm's experiences with aspiration biopsy of the liver in 1939,[5] further improvements in the procedure have made it widely acceptable as a method for clinical evaluation of hepatic disease.

Then, first of all, what does one wish to learn from a test of liver function? Is there pathology present? If so, what is the diagnosis? How severe is it and does it appear to be changing? Liver biopsy can, and should, answer all these questions.

Is It Valid

Secondly, one needs to ascertain whether the test is valid. To begin, we must know whether the biopsy specimen (which represents about 1/200,000 of the liver) is a representative sample. Since the normal liver is composed of morphologically identical lobular units and the biopsy specimen contains from five to 20 such lobules, one can assume that this is an adequate sample of generalized anatomical changes. Examples include obstruction of the common bile duct resulting in bile stasis throughout all segments of the biliary system, and metabolic alterations, such as fatty metamorphosis, iron deposition, glycogen storage disease, etc. Inflammatory and infiltrative diseases include viral hepatitis, granulomas, leukemia, lymphoma, etc. Our chemical studies of a few years ago confirmed a uniformity in distribution of lipids throughout the human liver both in health and disease.[3] Focal lesions, on the other hand, may not cause symptoms until they are fairly widespread, and this may account for the high frequency of diagnostic biopsy in such lesions. The high incidence of positive biopsies in so-called localized disease such as cancer and infection makes the problem of *sampling error* seem over-emphasized.

Correlation

Assuming that the biopsy is a representative sample, does the structure of the liver correlate with its function? In general, this can be answered in the affirmative. It is especially true if we take into account the more recent techniques of studying structure such as enzyme stains, flourescent and electron, microscopy etc. When we consider the non-specific nature of the "liver function" tests, the correlation between structure and function takes on a more significant meaning. These tests in general, merely reflect biochemical or physico-chemical changes caused by a variety of agents. The correlation of these changes with structural abnormalities is generally good. It should be emphasized, therefore, that the absence of morphologic changes in the face of abnormal chemical tests should lead one to re-evaluate the chemical tests in regard to their non-specific nature.[10] That is to say, if one or more of the biochemical tests are abnormal and the biopsy is normal, non-specific or non-hepatic causes for these abnormalities should be given strong consideration.

Accuracy

Does the test (liver biopsy) add to the accuracy of the clinical diagnosis? This question has also been answered in the affirmative many times.[9,10,13] Ward, et al. analyzed one thousand patients who underwent needle biopsy of the liver and found that the clinical diagnosis was confirmed in 49.2 per cent, corrected in 24.7 per cent, and was misleading in

Presented at the 110th Annual Session of the Medical Association of Georgia, May 5, 1964, Macon, Georgia.

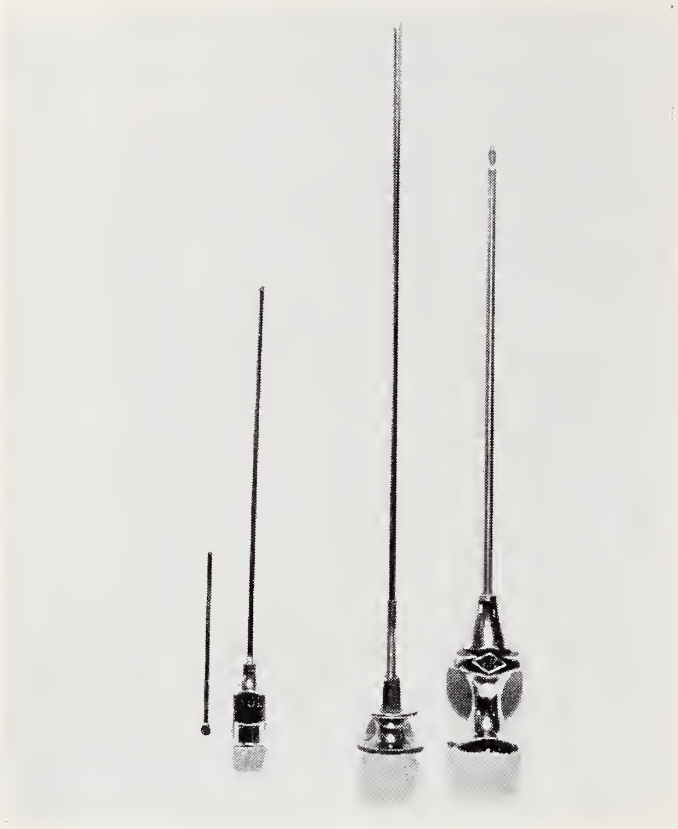

Figure 1
Menghini needle with rod insert, left. Vim Silverman needle extreme right with forked obturator right center. This demonstrates the relative differences in size of the needles as well as mechanism of action. (See text)

only 3.5 per cent. In the remaining 22.6 per cent the biopsy was either non-contributory or inadequate.[15] A recent report by Parker et. al. in 568 percutaneous liver biopsies indicates the procedure to be useful in the clinical diagnosis of better than 70 per cent of the cases.[8] Schiff's 341 biopsies on 324 patients shows a positive aid to diagnosis in 85 per cent of the cases.[11] Various reports of individual cases or small groups of cases point out that liver biopsy may not differentiate causes of jaundice in some situations. This was recently discussed by Achord et. al. in regard to two cases showing "viral hepatitis" by biopsy in whom extra hepatic obstruction was the cause of the jaundice.[1]

Degree of Meaning

Can we compare liver biopsy to other liver function tests with any degree of meaning? It is most difficult actually to compare many of the so-called function tests, since they measure chiefly one function or group of functions. According to Zamcheck, there are some 100 liver function tests devised to measure at least 77 liver functions in which over 5,000 chemical reactions are said to participate.[17] Using these tests, it is still not easy to diagnose with certainty a significant number of liver diseases. The biopsy on the other hand, is capable of making adequate morphologic diagnosis in many of the diseases that involve the liver.

It is not my intention to prove that liver biopsy can or should replace the conventional liver function tests. I do feel that this procedure compliments the chemical tests and has become a very necessary member of the team.[2]

Criteria for Selection

One must obviously establish specific criteria for selection of patients on whom needle biopsy of the liver is to be performed. Indications for the procedure vary widely. It is my custom to advise liver biopsy whenever there is a reasonable possibility that it will help in the overall diagnosis and management of the patient. However, the contraindications offer definite criteria which more often limit the performance of the test. Basically these are an uncooperative patient, depleted prothrombin content, significant ascites, local infection in the chest or peritoneum, high grade obstructive jaundice, anemia, and other causes of excessive bleeding (Weil's disease, homophilia, uremia, etc.).

Since the 1930's, various alterations in the technique, needles, etc. have helped to simplify the procedure greatly. The most recent addition has been the Menghini needle as applied to the basic principles of the trans-thoracic approach. The aspiration needle as designed by Menghini is both a coring and an aspirating instrument considerably smaller than most of the previously used needles or instruments. The shaft and diameter are of varying sizes; the most popular being seven cm. long and 1.2 mm. in diameter. The wall is extremely thin measuring approximately 0.1 mm. In addition, the tip is convex and is sharpened around its entire circumference. A metal cylindrical rod rests in the proximal cannula and distal hub. This acts as a blocking device to prevent aspiration of the core of liver tissue into the syringe. The diameter of the blocking device is about 0.2 mm. smaller than the lumen or internal diameter of the needle. The upper end of the rod is flattened to prevent it from falling into the distal end of the needle or from being drawn into the syringe during aspiration. Further descriptions of the technique can be found in Menghini's original article, as well as other sources.[6,7,9,10] The simplicity of the Menghini technique is advantageous. It is less difficult to obtain a good specimen, there is less pain to the patient; and it can be done on subjects who are less cooperative, including children, and experimental animals. The risk of bile peritonitis is probably not reduced by this needle. Whether a decreased incidence of hemorrhage has occurred is open to question. The reduced pain has made

patients much more amenable to repeat biopsies which at times are very important.

Post-biopsy precautions are very important and must not be overlooked. The specific program varies from one operator to another, but in general, the patient should be in the hospital and in bed for 18 to 24 hours post-biopsy. He should have the pulse and blood pressure checked regularly for 24 hours and remain under the direct supervision of the physician who performed the biopsy. Type and cross-matched blood, analgesics, vitamin K, position in bed, diet, etc. are less pertinent and can be varied according to one's own experiences. Remember, that the follow-up of the patient during the immediate post-biopsy period is as important as was his selection for the procedure in the first place.

Emphasis should be placed on the importance of proper training and experience in the technique of needle biopsy as well as a familiarity with liver disease. There is no question that in qualified hands, the mortality and morbidity rate of needle biopsy of the liver has been found in line with other procedures such as spinal puncture, thoracentesis and gastroscopy, not to mention general anesthesia alone.

Consideration must be given the importance of accurate histologic interpretation of the liver biopsy obtained. This interpretation depends upon the skill of those who are responsible for the processing of the tiny fragment of tissue as well as the experience and understanding of the pathologist in the tissue laboratory. Fortunately today, many hospital laboratories are so experienced that this does not present a problem. However, in situations which involve either an unusual histologic picture or lack of experience on the part of the laboratory, one can mail the slides along with clinical summary to a qualified local laboratory or to the Liver Registry of the Armed Forces Institute of Pathology in Washington, D. C.

Reasons For Failure

There are, of course, reasons for failure other than those of technique or interpretation. Structure and function may not correlate, and a "sick" liver, biochemically speaking, may apear much less "sick" histologically. Of course, focal lesions may be missed. For example, a nodule, tumor or necrotic area might be missed, but this is surprisingly infrequent. Of extreme importance are the experiences in neoplasm both primary and metastatic to the liver. Ward et. al. in 1954 published a 74 per cent accuracy of diagnosis in needle biopsy preformed in 111 patients with cancer of the liver.[14] In 1962, Parker reported an almost identical figure in 123 patients with metastatic cancer of the liver. (76.4%)[8]

Further application of liver biopsy to the differential diagnosis of abnormal liver function, hepatomegaly and metastatic cancer is pertinent. For example, Gall has recently shown that extra-hepatic malignant tumors are not significantly less frequent in patients with cirrhosis of the liver. However, a "noteworthy" lower rate of metastases occur in the cirrhotic liver, (ten to one when biliary cirrhosis is excluded).[4] Therefore, if one finds significant cirrhosis other than biliary cirrhosis on needle biopsy, there is little need to worry about having missed a metastasis in the liver. In the absence of other good evidence of cancer elsewhere in the body, one is justified in assuming that the condition is due to cirrhosis. This favorably alters the prognosis many times. Remember that this applies only to metastatic cancer since the statistics on primary liver cancer are quite different.

Complications

It has already been pointed out that liver biopsy has complications producing morbidity and mortality. Several of these complications are previously mentioned. Additional problems are: pneumothorax, procaine reactions, tumor seeding, and penetration of abdominal viscera particularly the gall bladder if the subcostal approach is used. Hemorrhage from the liver is the most feared complication, and is the chief cause of death. In both reviews by Terry[12] and by Zamcheck,[16] the overall incidence of this complication is about 0.2 per cent and the mortality rate from needle biopsy of the liver about 0.15 per cent overall. Both of these reports include cases up to 1952 only. Furthermore, fatal complications have been repeatedly shown to occur most commonly in patients gravely ill at the time of biopsy.

Needle biopsy of the liver, therefore, plays an important role in the clinical evaluation of liver disease. The procedure appears to satisfy the criteria for its utilization as a liver funtion test. In the hands of a well-trained operator, properly selected cases present minimum risks with maximum diagnostic results.

Case Reports

The first case illustrates the differential diagnosis in a patient with fever and deterioration in whom previous cancer had been present. A 46-year-old man had one year of weight loss, fatigue and recurring fever. Nineteen years before he had a nephrectomy for renal cell carcinoma. Temperature 101, no palpable liver or spleen. Sedimentation rate 76, BSP 12 per cent retention. Liver biopsy revealed normal liver tissue. After discharge, gross hematuria prompted cystoscopic exam which discovered a bladder tumor of clear cell renal carcinoma identical to the tumor removed 19 years previously. Subsequent exploration revealed tumor mass in the flank in proximity of the vena cava and aorta and the liver was free of tumor.

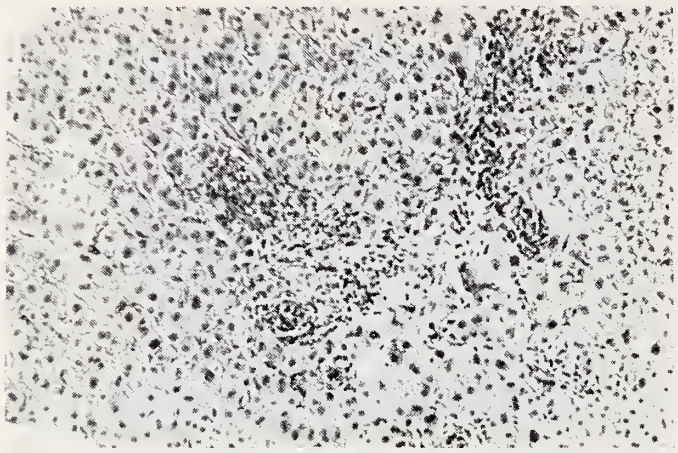

Figure 2

Thorazine Jaunice: low power showing portal infiltrate without significant hepatocellular change. Many of the inflammatory cells are eosinophils.

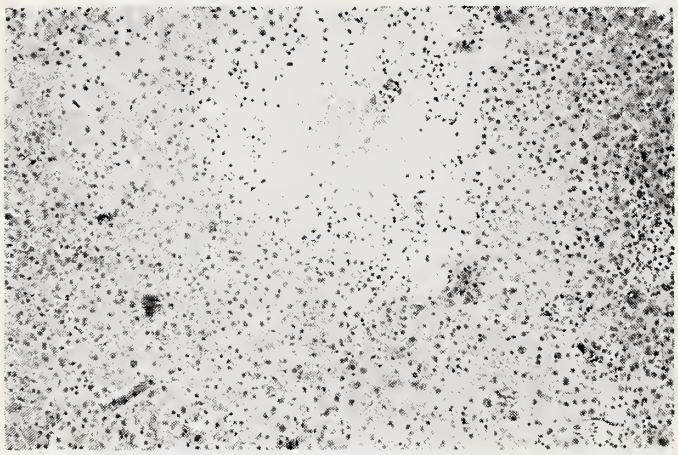

Figure 3

Extra hepatic cholestasis; advanced stage of bile infarct. Note "washed-out" bile in the center of a large area of feathery degeneration of liver cells — the so-called bile lake.

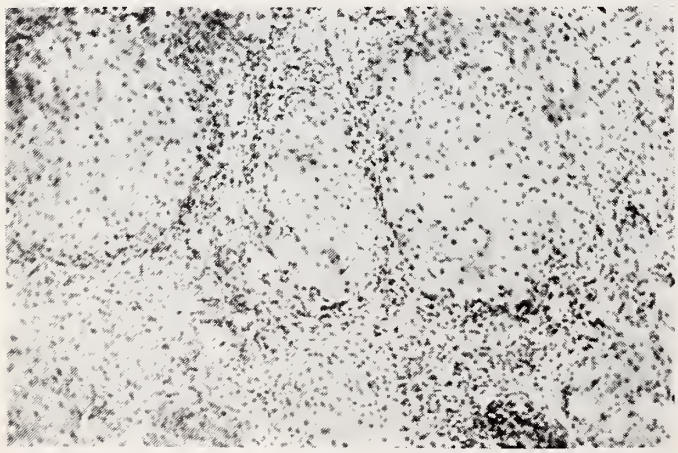

Figure 4

Post-necrotic cirrhosis and active hepatitis showing irregular, regenerating nodules of liver with compression of surrounding tissue. There is an intense inflammatory reaction. Note pleomorphism of regenerating liver cells and the absence of fat. There are no central veins in the nodules.

The next five cases illustrate the differential diagnosis of jaundice.

Two, white, middle-aged women with history of painless jaundice, pruritis and ingestion of thorazine prior to onset of jaundice both showed chemical liver function tests compatable with obstructive jaundice. Follow-up observations on both patients revealed normal liver function and complete recovery. (See Figure 2)

A 28-year-old lady had surgical exploration for severe endometriosis one month prior to onset of jaundice. Blood transfusion was given at time of surgery. Jaundice was moderately severe and chemical tests showed changes compatable with cholestatic jaundice. (See Figure 3) The patient was re-explored on the basis of the biopsy diagnosis of probable extrahepatic obstructive jaundice. An obstructing lesion of the right hepatic duct was found. The process is believed to be benign and relief of the obstruction with tube drainage has thus far been successful.

A 31-year-old male with ten days of fever and malaise and one week of jaundice showed questionable palpable liver on routine exam one month before symptoms. Liver enlarged to 11 cm. below costal margin and was very tender plus showing a palpable spleen and minimal cervical lymphadenopathy. Total bilirubin 4.6 mgm. per cent, thymol turbidity nine units, cephalin flocculation three plus. WBC and differential were compatable with infectious mononucleosis, although the heterophile was only 1:28. Liver biopsy showed portal inflammatory cells, pleomorphism of liver cells and areas of focal-necrosis. Recovery was complete and his course was compatible with hepatitis possibly due to infectious mononucleosis.

A 53-year-old white male with history of far advanced bilateral tuberculosis had had chest surgery one and a half years before. Shortly after surgery he became jaundiced and the diagnosis was homologous serum hepatitis versus toxic hepatitis from antituberculous drugs. He improved, but then approximately one year later had anorexia, weight loss and mild icterus with an enlarged liver. Thymol turbidity was ten units, BSP 22 per cent retention. Needle biopsy diagnosis — post-necrotic cirrhosis and active hepatitis. (See Figure 4)

The next case illustartes the use of liver biopsy in the evaluation of severe alcoholism and liver disease. This was a 52-year-old white female with 30 year history of excessive alcohol intake who presented with anorexia, edema and ascites. The liver was markedly enlarged and tender. The serum albumen was 1.8 Gm. per cent. (See Figure 5)

A 56-year-old female with known lymphadenopathy and fever for many years developed abdominal

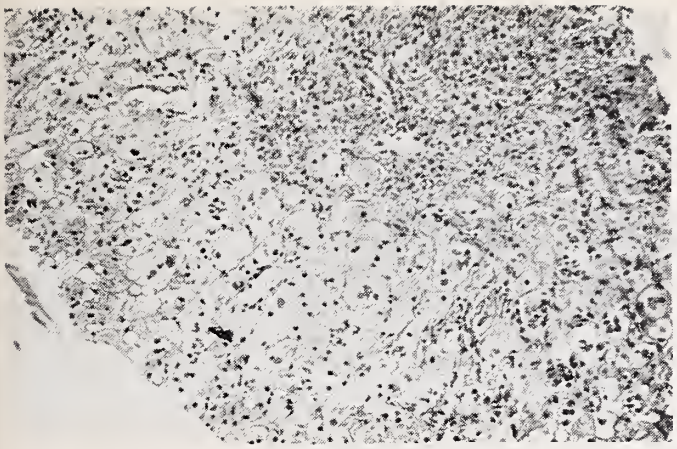

Figure 5

Severe alcoholism with liver disease. There is active degeneration of liver cells, increased fat and an area of early fibrosis noted in the upper right field. There are several areas of cytoplasmic hyaline degeneration known as Mallory bodies or alcoholic hyalin. They are thought to be highly significant in alcoholism with signs of liver disease. These changes occur in the so-called florid cirrhosis described by Popper.

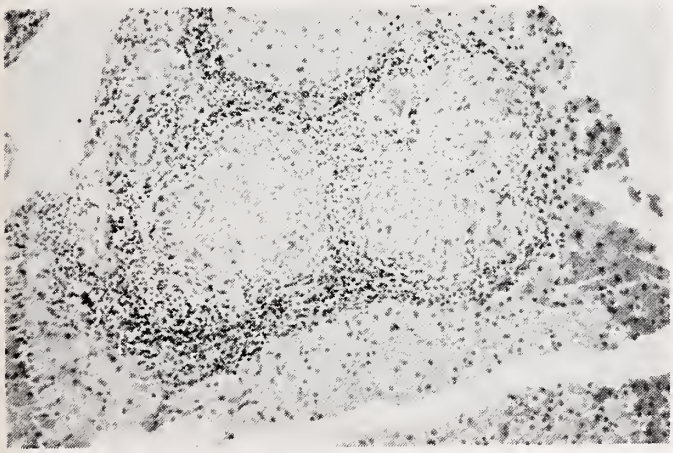

Figure 6

A circumscribed non-caseating granuloma consistent with Boeck's Sarcoid. Note the minimum of reaction in the surrounding liver cells.

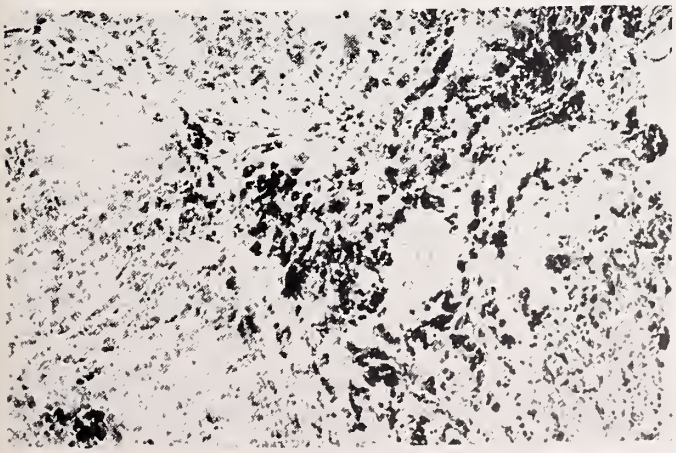

Figure 7

Iron stain demonstrating hemochromatosis. The iron appears black in the photomicrograph. Note the characteristic changes of portal cirrhosis as well as the marked increase in pigment present in the parenchymal and Kupffer cells as well as the periportal connective tissue.

pain and hepatomegaly. Surgical exploration was contemplated, but after needle biopsy of the liver, surgery was not indicated. (See Figure 6)

A 55-year-old man with one month of abdominal distention and indigestion was found to have a massively enlarged liver at the time of admission. A chest X-ray revealed a very small lesion at left lung apex. Serum alkaline phosphatase was 64.8 and serum bilirubin was nine mgm. per cent. Liver biopsy revealed anaplastic carcinoma, metastatic to the liver. Autopsy six weeks later confirmed findings as oat cell carcinoma of the lung metastatic to the liver.

A 55-year-old white female with known diabetes developed abdominal pain, swelling of extremities and was found to have an enlarged liver and abnormal chemical tests of liver function. A liver biopsy was done. (See Figure 7).

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ALLERGIC INVOLVEMENT OF THE RESPIRATORY TRACT

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■ ***Gratifying results may be obtained in the treatment of these patients.***

At least 15 per cent of the general population has clinical allergic disease which is of sufficient severity to necessitate their seeing a physician. The actual figure of allergic disease, much of which is sub-clinical, is closer to 50 per cent. This is not an uncommon disease! It is a common one and often unrecognized not only by the patient but also by the physician.

A Common Problem

If one consults the textbooks of medicine and chest disease one gets the impression that this is a rare, rather than a common problem. As students in medical school we are thoroughly indoctrinated in bacterial, viral and psychiatric facts. Allergic disease is not taught in many schools and almost all schools have inadequate preparation in this field. Many of our present young physicians are graduating with only one or two hours of instruction in allergic disease. Many hours are spent studying some rare cardiac anomaly which they may never see and little time is given to the diseases that will present themselves daily at their offices.

Chest symposiums come and go but seldom is allergic disease a topic on the program. This is not so much indifference as it is inadequate education. Too many of our professors still think of allergy as a rare, incurable disease, probably of psychiatric origin. This is a falsehood, completely unfounded, and with no scientific proof.

Rarely Published

Journals are rarely published now without articles related to allergic disease or at least to immunologic problems. It is a vast field, almost unexplored. Yet, new knowledge comes in daily. Auto-immune disease, varied allergic vasculitis problems, drug allergies, the immunological problems of organ transplants, all are being investigated with new fervor. It is safe to say that in ten years over ten per cent of the medical texts will be entirely on immunological diseases.

Let us briefly review things that occur in your office and mine and consider the relation of allergy to the respiratory tract. Review it with one thing in mind. We must recognize and understand the disease before we can treat it.

Figure I will give us a brief idea of immunology and its development. In allergic disease we have two individual types of allergy. First, the delayed or cellular hypersensitivity where the antibody is in the cell or fixed to the cell. This type of sensitivity appears to be determined by the lymphocytes. Second, the immediate or anaphylactic type of allergic disease where the antibody is circulating. In the latter, skin antibodies are present and these are called reagens. We do not know specifically where all of these are located but they are felt to be in the gamma 1A grouping which is still the mystery group of immuno-globulins.

The Inherited Variety

Most respiratory tract allergy is of the atopic or inherited variety. We feel that the major reactions occur from circulating antibodies producing the immediate type of response, although undoubtedly patients may have delayed hypersensitivity. One does not inherit a specific type of allergy to a food or inhalant but merely the predisposition to become allergic. The family history is extremely important and is often positive for asthma, hay fever and similar type problems. If the family history is positive for allergic disease one should always suspect allergy in the patient presenting with respiratory symptoms.

In order to better understand the end results seen in adults let us begin with a brief description of

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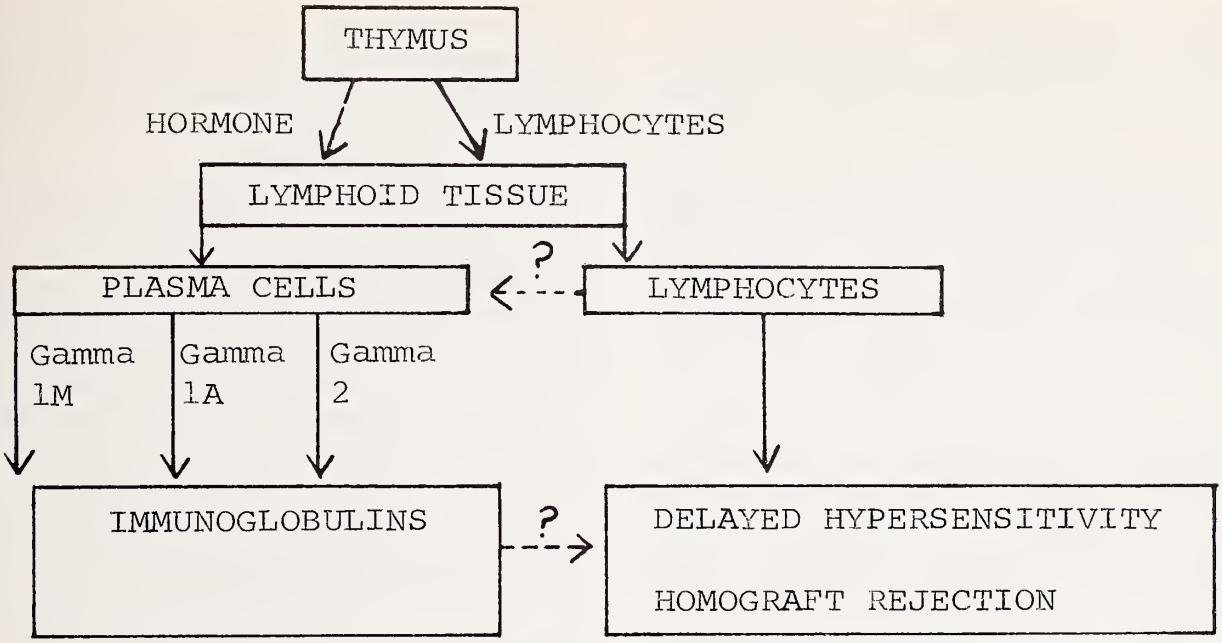

Figure 1

the typical atopic child. As an infant, inhalant allergy is practically nil; food allergy or allergy to chemicals in foods is the major cause of allergic disease in children. Logic would tell you that the initial symptoms will begin in the first organ offended and this is the gastrointestinal tract. The child first begins with colic. There is often associated regurgitation of foods and occasionally diarrhea or even constipation. These symptoms can be cleared entirely by changing the child's diet or by altering the formula through heating or other means. Heat often destroys or alters antigenic material. If the diet is not changed and the colic is not cleared, after four to six months the gastrointestinal tract may fail to respond to the antigen. This is why in pediatrics we hear the term "six months' colic." The allergic disease, however, does persist. Through absorption of chemicals into the body the patient may develop what we term atopic eczema or what is mislabeled "neurodermatitis." Here there is dry, red, itching, scaling dermatitis usually in the antecubital and popliteal areas and occasionally on the cheeks. At times the eczema is severe and can be generalized. The same antigens which initially produced the gastrointestinal symptoms are now producing skin disease. Here again, if the eczema is not recognized as a sign of food sensitivity, the child later will switch from skin eczema into mucosal respiratory tract disease. In treating eczema the pediatrician often says the child will outgrow it. The allergy is never outgrown! The site of allergy is simply altered. As mentioned above it generally moves from the intestinal tract to the skin, and later into the mucosa of the respiratory tract. The cause is still the same.

The initial respiratory tract symptoms usually present in a child as a "chronic cold." There is nasal congestion, serous rhinorrhea and often associated laryngitis and a croupy type of bronchitis. Often there is superimposed infection with lowgrade fever. As the months go by the mucosal involvement moves down into the lower respiratory tract and the patient may develop what is called asthmatic bronchitis and later severe bronchial asthma. All of these are the same disease. The only difference is in the location. Notice that the progression is usually from the nose downward. All of this occurs from sensitivity to chemicals present in food. In other words "what is one man's meat is another man's poison."

Treatment can be only a matter of food avoidance. There is no other therapy that offers successful management.

One must keep in mind that all patients who manifest allergic rhinitis or what is commonly called hay fever, are not only potential asthmatics, but are true asthmatics though simply subclinical. If one takes time to do pulmonary function studies on patients with allergic rhinitis one would find the vital capacity to be reduced on the average of 25 per cent and the maximum breathing capacity would be similarly reduced. It is important, therefore, that we not neglect the patient with allergic rhinitis. Many of the people who are seen in late life with emphysema, chronic bronchitis, bronchiectasis, etc., have developed this simply as a complication of long standing lowgrade allergic disease, often unrecognized by patient and physician. Allergy is of serious importance to each individual and should be treated early if we are to avoid the chronic disabling diseases which are seen often by the medical specialist in later life.

A discussion of food sensitivity at this point might be of help because the initial means of treating allergic people is exactly this — food avoidance.

Are skin tests necessary in the infant? The answer generally is no. If one can find a base formula that is tolerated without any evidence of clinical allergic disease both subjectively and objectively, the only need is to add one food at a time giving each food at least a seven day trial, keeping a complete diary of what symptoms appear following the intake of this food.

Skin Tests Helpful

In older children skin tests are often helpful. In skin testing one must remember that the test is as accurate as the antigen which it contains. No foods are stable. Milk will vary day by day depending on the diet of the cow. Certain chemicals in milk such as casein, lactalbumin and lactalglobulin are stable, but many other chemicals will vary depending on the diet of the animal. Any farmer will tell you that if a cow eats bitterweed, the milk must be discarded because of the bitter taste. Onions can be tasted in milk but since the odor is readily camouflaged by the use of Clorox, milk containing onion and Clorox is often sold on the market. Other antigens such as bermuda grass and the various weeds are not detectable by color, odor or taste. They are still present in the milk and are often responsible for the clinical symptoms presenting. Since milk content varies one may still have a negative skin test to milk and yet a positive clinical test from the patient.

Quantitative/Qualitative

A second important point to remember in food allergy is that this problem is quantitative as well as qualitative. If a person is slightly allergic to milk it may take ten gallons to make him have the very slightest bit of nasal congestion. Obviously, one or two glasses a day will not cause significant trouble. Milk is allowed in this patient in small quantities. There is the other extreme where the patient is highly sensitive to milk and milk products; here, even one or two drops of milk cooked into the food may cause the patient to have severe respiratory tract embarassment, often necessitating hospitalization. This patient generally does not need skin testing for milk since clinically he has proven sensitivity to it. His major problem is the avoidance of milk since it is common in many food mixtures. Each individual has his own point of reactivity; that is, each individual can tolerate a certain amount of each of his foods without symptoms, whereas a small amount added to this may produce definite illness.

A good way to get around mild food allergy is to let the patient rotate the food in and out of the diet, perhaps eating wheat one day, rye the next, oats the next, barley the next, rotating each cereal until perhaps a week or ten days later the individual can repeat the cereal rotation. In other words, before the wheat is eaten the second time, the initial load of wheat has been eliminated by the body. This is Doctor Rowe's technique.

You will be amazed at the improvement in some individuals, even adults over 50, obtained by the simple elimination of two or three strong food allergens. It is difficult to prove in adults and much easier to prove in children. Adults have marked inhalant sensitivities in many instances and, of course, have the other chronic debilitating pulmonary problems that make it difficult to pin down specific symptoms as being due to food allergies. Remember that foods are composites of chemicals and that any one or more of these chemicals may be producing the difficulty. For instance, if one is sensitive to a specific amino acid this amino acid could cause trouble even if it were present in any of ten or twelve foods.

Inhalant Allergy Appears

As a child grows older, at the age of six to sixteen, after exposure to various inhalants over the years, inhalant allergy begins to appear. Again the best treatment is avoidance. The most commonly incriminated inhalant is dust. Dust allergy generally is worse from September through May and often will clear during the summer when the child is out of the home and when the home is better ventilated. Animal epidermals, particularly feathers, dog hair, cat hair, wool carpets, cow hair in under-carpet, horse hair and goat hair used as padding in furniture are common causes of perennial allergic symptoms. Cosmetics, even soaps, are often incriminated. Certain of the molds form spores perennially, particularly alternaria.

The seasonal inhalants bring tree pollen allergy beginning around mid-March and running through the end of May, grass pollen beginning around mid-March and running through the first of November (chiefly bermuda), and fall pollen allergy beginning around mid-August and running through the first of November (chiefly ragweed). This information might help establish a diagnosis if the patient seems to have seasonal trouble. Skin tests should back up the history and desensitization definitely should help the patient.

Please keep in mind that an individual who has allergy to both grass and tree pollen or to grass and ragweed, would be considerably worse than the individual who has a single allergy to only one pollen. To get proper therapeutic results desensitization to both has to be carried out.

This brings us to the question of desensitization. Is it practical and does it work? Double-blind studies, some of which have recently been completed by

Doctor Francis Lowell in Boston, show that specific desensitization definitely helps the patient in providing clinical relief. The statistical results are approximately 85 per cent good to excellent. We still have ten to 15 per cent who are not adequately benefited and the reason here is felt to be due to multiple factors. First of all, many people are sensitive to so many materials that it is practically impossible for the body to build blocking antibodies to all of these substances. Second, there are many local pollens found only in the person's community. Third, the chief failure is a failure on the part of the patient either to understand the program outlined or failure to follow the food avoidance, inhalant avoidance, and inhalant desensitization techniques. When one considers the complexities of the disease with which we are dealing, the results that are obtained are amazingly good.

Long-acting Antigen

Because desensitization necessitates from one to two injections each week and since all of us are somewhat more "allergic" to needles than we are to the antigens themselves, recent attempts have been made to use a long-acting antigen. Antigens have been placed in various oil bases and administered as emulsions. This technique stimulated by Mary Lovelace of New York and Allan Brown of Boston has gained widespread recognition. It offers no improvement in results. It offers no improvement in cost to the patient. It does offer improvement from the standpoint of the number of injections and the need to return to the doctor's office for the injections. This technique has been frowned on by the Federal Drug Administration. It is still listed as experimental. There are many law suits at the present time against doctors who have used this technique. Approximately four in 1000 patients will develop sterile abscesses which last from three to six months and leave ugly scars on the arms.

On the Market

There are several other long-acting antigens now on the market. One is an alum precipitated antigen being publicized by one of the major dispensers of skin preparations. Again, no improvement in results will be obtained, but the extract injections can be cut from once a week to approximately once every three or four weeks. Side effects are few since less local inflammatory reactions have occurred to this particular product.

Dr. Maury Kaplan of Chicago is using a second type of product free from oil; his work is still listed as experimental but again, offers hope for more powerful antigens with less local reactivity and less side effects.

The logical desensitization technique is still to use water based extracts until something better is offered that has been thoroughly worked out in the better allergy clinics.

Desensitization to foods is never attempted. Desensitization is purely a means of protecting an individual from a specific inhalant antigen.

Skin tests with inhalants have an accuracy of approximately 90 per cent. Most of this is because the materials produced are identical in most instances to the other materials purchased in other areas of the country. In other words, dust is dust, bermuda grass is mainly bermuda grass and ragweed pollen is for the most part, like the ragweed pollen in other areas of the country. Desensitization to a specific antigen will usually accomplish 85 per cent good results in eliminating clinical allergic symptoms.

Time does not permit a full discussion of drugs that should be used in the treatment of allergic disease. Most of these drugs are familiar to the average physician. It should be pointed out that steroids are preferably not used, but if used, should be used in small quantities. Generally if one is committed to the use of steroids at all, one probably should be committed to their use in small amounts from then on. Remember that these are purely anti-inflammatory agents. Their major activity is against the delayed type of allergic response. They are not as protective in the immediate vascular or anaphylactic type of allergic reaction.

Regulation of Humidity

Before closing let me point out one other factor. This has to do with all respiratory tract diseases and certainly has a great deal to do with the asthmatic patient. Today we have thermostats to regulate the temperature but in most homes there is no provision made to regulate humidity. From a health standpoint humidity is in many ways more important than temperature. Humidifiers should be attached to all furnaces. The humidity in the home should be maintained at between 40 and 50 per cent. In the room of an asthmatic the humidity is best maintained between 90 and 100 per cent until the individual brings up the mucus plugging the respiratory tract. This is not a problem during the summer unless the house is air-conditioned since the inside humidity is often 80 to 90 per cent, just as it is outdoors. In the winter when the temperature is 20 and 30 degrees outdoors the air drops its moisture. When the air is warmed up either in the chest or in the home, the relative humidity may drop to approximately 15 per cent. The air is thus extremely dry and this dry air in turn chaps the lips, dries the mouth, thickens the saliva, and thickens into glue the serous and mucus discharge in the respira-

tory tract. I have seen many small children cough and wheeze for weeks, finally getting complete relief after coughing up one or two jellied plugs or casts of the bronchial tree. If this cast had not been allowed to form, the attack would never have been precipitated. Humidity is often as important as desensitization. Food avoidance and desensitization may cut down on the amount of mucus formed, but it is important to keep the mucus that is produced of low viscosity. Then it can be expectorated, clearing the respiratory tract.

The best expectorant and best liquefier of mucus is potassium iodide. Over 15 per cent of patients will not be able to tolerate this drug since they are either sensitive to it or over-reactive to it. In these individuals organic iodides often can be tolerated.

In this rambling discussion I hope we have been able to awaken interest in allergy as a cause of respiratory disease. In dealing with a pulmonary problem always examine the nose. If the nose shows pale membranes, a great deal of serous discharge, nasal polyps or chronic sinus involvement from allergic reactivity, one can be certain that many of the pulmonary symptoms are also coming from this. Look for allergy. Recognize its foot print and treat it. I think all will be amazed at the results.

478 Peachtree Street, N.E.

SUMMARY OF RECENT MAG COUNCIL AND EXECUTIVE COMMITTEE ACTIONS

(The full minutes from which these summaries have been abstracted are available to any MAG member upon request to the Journal.)

Executive Committee/October 3, 1964

Correction made in the minutes of September 19-20, 1964, in the item of "Redistricting of Councilor Districts" to read:

"At this meeting the committee agreed to recommend to Council that the redistricting be done on the basis of the new Congressional Districts, and that any existing local county society crossing district lines may choose which district they wish to affiliate with. On motion it was voted to accept the report and recommend this to the House of Delegates. On amended motion to the above motion it was voted to recommend that the House of Delegates delegate authority to Council to approve the new county societies as they are set up prior to the 1966 Annual Session."

Clarification of the action taken on the item of "State Marriage Laws" at the September Council meeting was made in the form of a motion as follows:

"The Executive Committee's interpretation of Council action is that the Association should not prepare legislation but will advise and support any acceptable legislation proposed by the Council of Churches pertaining to the revision of the marriage laws, with this legislation to be reviewed by the Executive Committee."

Corrected minutes were approved as read.

Received for information: (1) New Jersey and Missouri National Education Program letters; (2) Arizona Medical Association Letter re Merck and Company; (3) referred to MAG-AMA Delegates, Dr. Rumph letter re AMA Council on Medical Service Congress on Voluntary Health Insurance and Prepayment; (4) Mr. Krueger suggested an additional mailing to further expain Kerr-Mills in Georgia, and the advertising campaign which was published October 11; mailing to include pamphlets from the State Department of Family and Children Services, and AMA, for MAG members' use in explaining the program; (5) Resignation of Alex Little, M.D., Valdosta, from the State Board of Health. Agreed that President of Eighth District should submit names of three nominees for vacated office, and that Governor Sanders should be notified of resignation and selection of nominees, one of whom will replace Dr. Little; (6) Appointment of Ad Hoc Committee to Study Possible Nursing Home Care for Nonpsychotic Aged Patients: The Executive Committee appointed the following to the committee: Charles T. Cowart, LaGrange, Chairman; John S. Atwater, Atlanta; John Kirk Train, Savannah; Bruce Schaefer, Toccoa; T. Gray Fountain, Albany; Robert L. Bennett, Warm Springs; from the Medical Association of Georgia; with Mr. James Segars and Mr. Harold Parker, of the State Department of Family and Children Services as Ex-officio members; Mrs. Ann Dean, and Mr. C. O. Templeton, as Ex-officio members, representing the Georgia Nursing Homes Association; John T. Mauldin, Ex-officio, as representative of the Commission on Aging; and a representative of the State Department of Public Health, as an Ex-officio member, to be appointed by the Chairman of the State Board of Health.

Date and site for the meeting of this ad hoc committee are to be determined by Dr. Cowart, Chairman, and Dr. Mauldin; (7) State Board of Health met October 14; Executive Committee met with them; (8) Arrangement of an appointment with Governor Sanders to discuss implementation of MAA in 1965; committee to be appointed for the visit.

State Medicare Review Board/October 11, 1965

Summary received of the current national Medicare Program by R. C. Williams, M.D., Atlanta, based on Seventh Annual Report received from Office for Dependents' Medical Care, Denver. Program is conducted in all states; in 12 it is administered through contract with the state medical association. Seventy-two per cent of the patients treated throughout the United States in 1963 were wives; 28 per cent were children. The average amount paid or a physician's claim for all states in 1963 was $76.71.

A statistical report on the Program in Georgia for the period from October 1, 1963, through September 30, 1964, was presented by Mrs. Butler as follows:

Total number claims received	14,732
Number returned for additional information	2,823
Number adjudicated by Review Boards	226
Number rejected (mostly not eligible as outpatient care)	316
Number paid	11,172
Total $ amount paid	$914,014.05
Average amount paid per claim	$ 81.81

Motion made and carried—Recommendation to MAG Executive Committee of Council that a study be made to re-evaluate the Schedule of Allowances with the possibility of raising fees in Georgia under the Medicare Program, this study to be completed in order that re-negotiation of the contract for 1965 might be made on a more equitable basis.

Relative Value Study Subcommittee/October 18, 1964

Recommend that: Three sets of Relative Value Study data be listed by each procedure as follows: (1) 1960 California Relative Values; (2) MAG Survey Relative Values; and (3) Specialty Society Relative Values. It was further recommended that MAG seek to employ a person knowledgeable in medical nomenclature. Voted to furnish each of the six committee members with a copy, in notebook form, of the compiled data, so that the committee might study the information prior to the next meeting.

PROBLEMS IN TREATMENT OF ATHLETIC INJURIES

Fred L. Allman, Jr., M.D., *Atlanta*

■ ***The athlete is usually highly motivated to return to activity and in most cases will cooperate with the physician to the fullest.***

A. From Standpoint of School Administrator:

Frequently when problems related to athletic injuries are discussed there is too little emphasis placed upon the role of the school administrator. The school administrator holds a key role because he is the one that is responsible for financing the athletic program.

If financing is good, then well-trained and qualified coaches may be hired, proper equipment purchased, more than adequate athletic facilities made available, and a preplanned method of financing the cost of injuries or accident insurance can be established.

There is still an alarming number of schools that have inadequate financial support for their athletic program; yet, these schools with poorly trained coaches, inadequate equipment and no method of financing the care of their injured, compete week after week against those schools that have no similar problem. This problem is not necessarily related to the size of the school or to the size of the community. Many small schools and many large communities have excellent athletic programs while other schools and communities nearby have inferior or inadequate programs.

This problem, although directly related to the school administrator is indirectly related to the physicians of the community. Because of professional and civic responsibility every physician should accept the challenge to aid the school administrator in providing adequate financing for the athletic program.

There should never be any question regarding the method of financing the treatment of the injured athlete. The plan of financing should be made available and understood by all before practice for a given sport ever begins.

Possible methods of financing include:

1. Participants self-insured
2. Participants insured by school
3. Combination of 1 & 2
4. School self-insured
5. School self-insured plus outside catastrophie insurance.

The plan most desirable depends upon the needs and desires of the school or community. A large community might find it cheaper to be self-insured while a much smaller community or school might begin with self-insured participants.

B. From Standpoint of Coach:

Most of our professional and collegiate coaches and many of our high school coaches of today are highly specialized and technically trained in the methodology of the objectives and tactics of the pass defense, the kicking game, the Oklahoma offense and the ten basic axioms of defensive football as advocated by Paul "Bear" Bryant. Yet, many have little understanding of the mechanism of injury to their athletes. There are certain inescapable injury hazards in sports, especially football, due to the very nature of the vigorous body-contact, and a knowledge of the mechanics of these injuries is essential if they are to be prevented.

Also, too few coaches have an adequate knowledge of training objectives or the essential components of a well-balanced conditioning program.

Dr. S. E. Bilik has stated that the primary objective of intensive training is "to put the body with extreme and exceptional care under the influence of all the egents which promote its health and strength in order to enable it to meet extreme and exceptional demands upon it. Training aims to condition the muscles, the heart, the lungs, the joints, the nervous system, the mind, the whole body, every tissue and every cell to function at maximum possible efficiency and to stand up under the most grueling stress and strain."

If this objective is to be achieved then certain specific steps must be included in the conditioning program.

1. Endurance training
2. Strength training

Presented at the 110th Annual Session of the Medical Association of Georgia, May 5, 1964, Macon, Georgia.

3. Flexibility training
4. Reaction training
5. Heat training
6. Development of specific skills
7. Phychological preparation
8. General health measures

Further, our coaches of today are faced with a problem, which, according to many of them is becoming increasingly more frequent. This problem is a lack of *discipline* on the part of the athlete.

Many youngsters of today enter into athletics at a very young age. In the majority of the "biddy leagues" and even in our junior and senior high schools, too little time is devoted to conditioning. Instead of conditioning in order to play the game, most of our athletes of today play and hope to become conditioned while playing. Most programs fail to achieve a high level of fitness unless certain standards are established and are required for participation, especially in the contact sports.

A Glorified Program

As a result, many of our youngsters graduate from the "glorified program," which required little physical effort, into highly specialized programs where they are required to "pay the price" before becoming a part of the team. Many of these athletes, although gifted physically, are not willing to sacrifice the time and effort necessary to prepare themselves for such a program, and due to lack of discipline quit the team. A few are unwilling to admit that they are to blame and often will even seek injury or other methods as an escape.

The day is rapidly approaching when the youngster that wishes to participate in college sports on the varsity level will begin to prepare himself while in the first grade. This preparation will not necessarily include skill training for that particular sport, but rather will include endurance training, strength training, reaction training and the other steps which were previously mentioned.

C. From Standpoint of Player:

The physician that treats athletes is attending an individual that in most cases is strongly motivated to a quick recovery. The injuries which occur to athletes are like injuries which may occur to anyone else—the difference is not the injury, but in the individual. The athlete is usually highly motivated to return to activity and will cooperate with the physician to the fullest, once he knows that the physician is also anxious to have him participate in athletics. The athlete must be made to understand that recovery must be complete and that total rehabilitation must be the goal before he may rejoin the team. Any compromise that requires less is not being fair to the school, the team or the physician, and most of all to the player himself.

Ideally the physician that treats an athlete will observe the athlete after return to activity, to be sure that he has fully recovered. Often on examination in the office, pain may be denied and unobserved, while on the playing field it becomes very difficult to conceal.

D. From Standpoint of Parent:

Every physician that has treated many injured athletes has encountered the parent that is overly anxious to have his child participate in athletics, although he may be disabled due to injury. Few, if any, parents however, want their child to participate if there is a likelihood that participation will result in a prolonged delay in healing or in a permanent disability. It therefore becomes necessary for the physician to impress upon the parent the seriousness of the condition which requires abstinence from athletics temporarily or permanently and also to reassure them regarding minor injuries in which participation is allowed.

The parent and the physician that automatically restrict a player without adequate evaluation of the injury do so without the best interest of the player or his team.

A child is usually the parents most prized possession and the parent is most often anxious to do the thing that is right for the child, once adequate guidance is provided.

It is well to remember also, that any physician who examines candidates for athletic competition and passes them, assumes the responsibility for their physicial fitness.

A physician must be individually responsible for his own decision. An injured player, or his parents, or legal guardian, can bring suit against a physician, without having to obtain legislative permission should any element of foreseeable injury be in evidence.

The physician that treats athletes should also remember that medicolegal problems of injuries to athletes are essentially the same as those encountered in the general practice of medicine and surgery. Failure to follow standard procedures and established methods of treatment of an injury has been frequently held sufficient to justify a jury's finding of negligence.

E. From Standpoint of Physician:

Problems Regarding The Physical Restriction

The physician who examines an athlete to evaluate him for participation in sports has a tremendous responsibility. Factors which he must consider are:

A. Physical clearance
B. Assessment of disproportion factors

C. Psychological clearance

D. Tactful guidance

A. Physical Clearance:

Consideration and complete evaluation must be given to cardiovascular disorders, chronic respiratory diseases, gastrointestinal disorders, absence of paired organs, visual and hearing defects, neurological problems, genito-urinary conditions and other conditions such as diabetes mellitus.

Congenital, developmental and acquired orthopaedic problems must also be given thorough evaluation. Congenital anomalies of the low back are frequently undetected in our athletes because the examining physician is all too prone to make a diagnosis of a strain or a sprain without complete evaluation. A thorough history and physical examination should be complimented by adequate X-rays of the involved area (in the lumbosacral area this would include AP, lateral, both obliques and a spot lateral of the lumbosacral spine).

During a two year period at the University of Nebraska 27 candidates for all sports, amounting to approximately ten per cent of the total examined, were found to have clinically significant low back anomalies.

In the Atlanta High Schools routine spine X-rays are not made on all candidates for football, but are made on all athletes with back injuries or symptoms. A high percentage of those suffering from low back symptoms have been found to have congenital anomalies of the lumbosacral spine. In reaching a decision regarding the playability of an athlete with one or more spinal defects it is necessary to individualize each case. Every athlete with a spinal defect should not be disqualified from competition in sports anymore than every athlete with a heart murmur should be disqualified. Usually the best single indicator of playability will be the absence of symptoms. Dr. Lynn O. Litton has noted that muscular development and general bodily fitness which is essential to athletics is also essential in the prevention and treatment of back injuries. However, because of the greater functional demands which may result from athletic participation, chronic symptoms may occur, and when symptoms cannot be controlled by a program of muscle strengthening exercise, then the sport causing the symptoms should be avoided.

Several of our countries best Olympic athletes, as well as some of our better professional athletes are known to have serious spinal defects, yet remain asymptomatic most of the time. Not infrequently athletes with spinal defects remain asymptomatic during their competitive years only to become symptomatic once they stop competition and allow their fitness to decline.

Osteochondritis dissecans, especially when it involves the knee, because of its frequency of occurrence and its occasional poor late result, constitutes another problem in the restriction of athletes. Usually these athletes are restricted, and frequently immobilization is advised for an indefinite period. However, in a casual review, several cases that disregarded medical advice and continued active athletic participation were noted to have healed as rapidly as did those who accepted restriction of activities and conservative treatment.

Developmental conditions such as enchondroma, multiple exostoses, fibrous dysplasia and solitary bone cyst, should restrict the individual from contact sports until remedial action has been taken.

The *Osteochondroses* usually do not need to be restricted if it is a traction epiphysis that is involved and if symptoms are minimal or absent.

B. Assessment of Disproportion Factors:

A difficult problem for both coach and physician is the big child — large in frame and heavy, but not mature and not coordinated, and in some physical aspects, not developed. The physician must look carefully at this individual and protect him from himself and others in relation to muscular activity and ability.

C. Psychological Clearance:

The son of a "great athlete" is often pressured into competing in a sport for which he is not fitted and really has no interest; others are often compelled to compete because others do and it seems that it is "the thing for them to do" also. The perceptive physician that recognizes decreased desire can often guide these boys and should counsel with their parents. Many injuries in sports are caused by disinterested participants.

D. Guidance:

An important responsibility of the physician is not only to determine if the individual is physically capable of engaging in sports without risk of damage to the body, but also to provide and encourage those who are eliminated from participation in contact sports to participate in some other form of physical activity which is compatible with their physical limitation.

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HYPERVENTILATION SYNDROME

Hugh K. Sealy, M.D., *Macon*

■ ***This syndrome though commonly seen in private medical practice is not well understood by many physicians.***

HYPERVENTILATION and the various symptoms that produce it is one of the more common syndromes seen in private medical practice. The syndrome, however, is not well understood by many physicians. The hysterical female seen in the emergency room with tetany is easily recognized as presenting this problem. This, however, represents only the more severe and infrequent example. Many of the other symptoms of hyperventilation are not as well known. Of particular importance is the chest pain that frequently occurs in the hyperventilating patient. These symptoms closely simulate coronary disease. The purpose of this discussion will be to review the problem of hyperventilation syndrome and in particular to discuss chest pain produced by over-breathing.

Not A Disease

It is important to realize that hyperventilation is a manifestation of an anxiety neurosis and in itself is not a disease. Hyperventilation may occur with other symptoms of anxiety. It is not clearly understood why the anxious patient hyperventilates, but I think that we are all aware that under stress we tend to take a deep breath. It is a common practice to ask the patient to take a few deep breaths to relax the abdominal muscles during a physical examination and inadvertently we may contribute to the development of the hyperventilation syndrome. Most likely, however, it is, as are most of the other symptoms of anxiety neurosis, preparation for flight.[1] The attacks are maintained by anxiety over the curious and frightening symptoms that the patient experiences.

The physiological effects of over-breathing have been studied by several investigators. The loss of carbon dioxide occurs rather rapidly. The arterial CO_2 content is reduced by five volumes per cent and the CO_2 tension by seven to 16 MM of mercury by a single respiratory cycle.[2] The alveolar CO_2 tension is reduced by one-half in a few seconds of hyperventilation. At the end of 60 seconds of hyperventilation the major changes in CO_2 tension and pH have occurred.[2,3,5] These changes result in an increase in cerebro-vascular resistance, and cerebral hypoxia occurs.[1,2] The EEG shows large slow potentials due to this hypoxia.[3,4] It has also been shown that prolonged hyperventilation can be maintained without much effort.[5,8] During these experiments the pH and the CO_2 tension and content remain at abnormal levels. Of considerable importance clinically is the fact that although these experimental subjects did not seem to be over-breathing, a few deep breaths could produce tetany. Some observers have felt that the normal subjects who hyperventilated and showed marked chemical changes did not have the same symptoms as those noted in the patient, and, therefore, that the symptoms of hyperventilation syndrome are largely due to the underlying anxiety neurosis.[5,6] Postural hypotension apparently can also be aggravated by hyperventilation. Conversely, it has been shown that there may be a rise in blood pressure during hyperventilation attacks. This discrepancy has been attributed to the fact that the central effect of lowered CO_2 tension is a reduction of the blood pressure by vasodilatation while the peripheral action is vasoconstriction and elevation of the blood pressure. I am sure that the patients also have a labile vascular tree and this accounts for some of the changes in the blood pressure that have been noted.[3,7]

I have reviewed the charts of 1000 consecutive patients seen in my office. Although this group included many who came simply for routine physical examinations, 63 patients presented with complaints of hyperventilation syndrome. This incidence of 6.3 per cent is about the same as that reported by other

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authors, although Rice reported an incidence of 10.7 per cent.[8] I will review some of the clinical experiences with this syndrome but will not subject this to a statistical analysis.

Nonexistent

Although much has been made of the tetany that accompanies hyperventilation, I found this to be almost nonexistent in this survey. I feel certain that emergency room experience would reflect a higher incidence of tetany. A much more common complaint was "blackout spells." This is a misnomer, for none of these people lost consciousness, but felt light-headed, as if they were floating into space. As one lady described it, her head felt as if it were separated from her body. This sensation was also described as dizziness, but none had true vertigo. Parasthesias of the upper extremities was common, and it is important to note that unilateral involvement, usually on the left, was seen most frequently. The perioral area and feet may also tingle in some patients. No adequate physiological explanation has been advanced for the parasthesia. Chronic fatigue and a "washed out feeling" were common symptoms in the chronic hyperventilator. A patient that illustrates this group of symptoms was a 19-year-old college student who complained of weak spells while studying. These symptoms would usually develop within a few minutes to one hour after he had started studying. His mouth would become dry, he would tremble, and because of these symptoms, he would have to lie down and stop studying. He was having difficulty in maintaining his grades and, in fact, was dropping out of school because of his poor scholastic record. Physical examination and laboratory studies were negative. A few seconds of hyperventilation reproduced his symptoms of weakness and trembling and feeling faint.

Common Complaint

Dryness of the mouth and lips is another common complaint. To satisfy this desire for more air, most patients find it necessary to breathe through their mouth and this dries the lips and mucous membranes of the mouth. For various reasons patients with dry mouths swallow frequently and as a result ingest large quantities of air.[1,2,8,9] This produces the gas and bloating which frequently accompanies hyperventilation. I have found that anticholenergic drugs or any drugs which dry the mouth may aggravate the aerophagia.

Air hunger occurs as a complaint in a relatively small number of patients initially. These that do have complaints of shortness of breath may say: "My breath doesn't do me any good;" or, pointing to the epigastrium, "It stops here;" or "I can't take in enough air." Many are unaware that they sigh frequently until it is brought to their attention. The patient's spouse, however, is usually quite well aware of the sighing. There is no relationship between exercise and the patient's dyspnea, the complaint frequently occurring at rest, as when watching TV or soon after retiring, particularly after a busy day. The patient sometimes will awaken during the night, gasping for breath, and will have to sit up in bed or go to an open window to try to get more air. This shortness of breath occurring during sleep is thought to come from a bad dream, remembered or not, which frightens the patient.

Reluctant to Over-breathe

When the patient is made to over-breathe to reproduce his symptoms, he seems to do this reluctantly, taking only two or three deep breaths, then stopping and having to be encouraged to continue. He seems to use more of the chest, neck and even facial muscles in breathing than is normal. Many will continue to hyperventilate after being told that they can stop over-breathing. Frequently the patient will complain of being out of breath from hyperventilation. This seems to be a tiring procedure which may account in part for the complaint of chronic fatigue. Usually the light-headedness and the floating sensation begin after a few seconds of over-breathing.

The chest pain of hyperventilation syndrome is generally of two types. Most common is a sticking and stabbing pain in the left chest. This lasts for varying lengths of time and may be located anywhere over the anterior chest, but is usually just lateral to the sternum, or, less commonly, lateral of the nipple line. The other type is a prolonged, dull, aching pain across the chest which lasts hours or days. Both types frequently are associated with numbness of the left hand, which is described as being a numbness of the entire hand, rarely involving the arm. The chest pain in the great majority of patients involves only the left chest. Many patients will state that they have "blacked out" during the pain. The pain is practically never substernal. Some patients may have both types of pain described above. Patients also complain of pounding of the heart, and some may have "skipping" of the heart, and it has been shown that arrhymthias may be produced by hyperventilation.[2,12] The chest pain is probably due to several factors. I am sure that muscular soreness from the exaggerated use of chest muscles plays a part. Since these patients also have aerophagia, it is entirely possible that distention of the stomach or colon by air may initiate the pain in hyperventilation. To reproduce the pain it is frequently necessary to hyperventilate the patient for

a prolonged period of time and to continue after the nervous system symptoms have developed. The patients who complain of chest pain and hyperventilation are frequently told that they have had angina or a coronary occlusion. A good example of this was a 45-year-old white male that I examined for disability due to coronary disease. About a year before I saw him he had experienced an episode of shortness of breath followed by chest pain and "blacking out." The pain was shooting in nature and over the entire left chest. He was hospitalized for eight weeks and was out of work for 12 more weeks. Eight months after the initial attack, while at work, he had a similar attack and was hospitalized for 16 days. Following this, he was retired. He continued to have chest pain of two types. One was a dull, aching, almost constant pain, the other a sharp and shooting pain which occurred with or without exertion, but always preceded by shortness of breath. Nitroglycerin would relieve the pain in ten to 15 minutes. It is of interest that the first attack occurred while he was having marital difficulties which later culminated in a divorce. On physical examination he was found to have sweaty palms, dilated pupils, and sighed frequently. Resting electrocardiogram and a Master's two-step test were normal and did not result in pain. Hyperventilation reproduced his chest pain. This relatively young man had been retired and was just as disabled as if he actually had coronary disease.

Pressure Tenderness

Another point of considerable importance is pressure tenderness over the costal cartilages. The tenderness usually involves the second, third and fourth cartilages on the left but also may occasionally involve the lower cartilages. In my experience there is rarely involvement of the right costal cartilages. In the majority, the tenderness is localized to one or two cartilages and is usually quite exquisite. There is no swelling as is seen in Tietze's syndrome. On occasion there may be some tenderness over the ribs lateral to the midclavicular line but this is much less common. Apparently this pain is the result of the exaggerated muscular contractions and elevation of the anterior chest wall during hyperventilation. This is an important diagnosic point, as it occurs in practically all patients with acute pain due to hyperventilation syndrome but is extremely rare in patients with coronary disease.

Changes in the T waves and ST segments have been reported in patients with hyperventilation syndrome. The T wave may become inverted in Leads II, III, and some of the V leads. It has been suggested that these changes are due to the alkalosis that accompanies over-breathing.[7,9,10,11] These changes are similar to those produced in some anxious patients by any manner that increases the heart rate. This, of course, makes the differentiation of coronary disease and hyperventilation more difficult.

Important Manuever

Reproduction of the patient's symptoms by having him voluntarily over-breathe is an important diagnostic and therapeutic manuever. The patient's symptoms should begin to appear after only four or five deep breaths, and usually at this point the patient will want to stop over-breathing but should be encouraged to continue until enough of the symptoms have occurred to convince him that this is the mechanism of their production. As mentioned above, the patient will usually continue to over-breathe when told to stop doing so.

It has been my experience that treatment is not very satisfactory. Basically treatment should be directed to the underlying anxiety neurosis. A superficial explanation of the physiological basis of the symptoms and reassurance as to the absence of serious organic illness offers some symptomatic relief. The time-honored paper bag may help alleviate the symptoms of tetany, parasthesia and light-headedness but is of very little benefit to the other symptoms. It is important to remember that in many of these people over-breathing has become a habit and normal breathing is so involuntary that normally one is unaware of his over-breathing. To focus an already anxious patient's attention to his breathing may aggravate his symptoms for a time. It is well for the physician and the patient with chronic hyperventilation to realize that the symptoms will persist for a while and that they both will have to live with them.

To summarize, hyperventilation syndrome is a manifestation of an anxiety neurosis seen commonly in internal medicine practice. The usual classical symptoms of tetany and marked hysteria are rare. The more common symptoms of light-headedness, parasthesia, chronic fatigue, chest pain, and aerophagia and their physiologic basis were discussed. It was also pointed out that treatment is not very satisfactory.

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1964-1965 CALENDAR OF MEETINGS

State

January 19-21, 1965—Electrocardiography Seminar sponsored by the Department of Continuing Education of the Medical College of Georgia, Augusta.

January 25-27, 1965—American College of Surgeons (sectional meeting) Atlanta Biltmore Hotel, Atlanta.

February 13-14, 1965—Seminar on Arthritis, sponsored by the Georgia Chapter of the Arthritis Foundation, Academy of Medicine, Atlanta.

March 2-3, 1965—"Concepts of Fetal and Maternal Welfare," sponsored by the Department of Continuing Education of the Medical College of Georgia, Augusta.

March 31-April 2, 1965—"Problems in Gastroenterology," sponsored by the Department of Continuing Education of the Medical College of Georgia, Augusta.

May 2-4, 1965—111th Annual Session of the Medical Association of Georgia, Augusta.

Regional

January 14-16, 1965—Gastroenterology Seminar sponsored by the University of Florida College of Medicine, Gainesville, Fla.

January 14-16, 1965—Symposium on Dermatology in General Practice, Mound Park Hospital Foundation, Inc., St. Petersburg, Fla.

January 21-23, 1965—Pediatric Seminar—"Current Concepts in Allergy and Clinical Immunology in Childhood," sponsored by the University of Florida College of Medicine, Gainesville, Fla.

January 29-31, 1965—Southern Radiological Conference, Grand Hotel, Point Clear, Ala.

February 13-17, 1965—American Academy of Allergy, Americana Hotel, Bal Harbour, Fla.

February 19-24, 1965—American Society of Abdominal Surgeons, Jung Hotel, New Orleans, La.

February 25-March 2, 1965—American Dermatological Association, Boca Raton Hotel, Boca Raton, Fla.

February 26-28, 1965—Virginia Pediatric Society, The Greenbrier Hotel, White Sulphur Springs, W. Va.

March 4-5, 1965—Obstetrics and Gynecology Seminar sponsored by the Division of Postgraduate Education of the University of Florida College of Medicine, Gainesville, Fla.

March 8-11, 1965—New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans, La.

March 22-24, 1965—Dallas Southern Clinical Society, Statler-Hilton Hotel, Dallas.

March 23-26, 1965—National Society for Prevention of Blindness, Rice Hotel, Houston.

March 25-27, 1965—Mid-Central States Orthopaedic Society, Velda Rose Motel, Hot Springs, Ark.

March 26-27, 1965—National Conference on Rural Health (18th) Americana Hotel, Miami Beach.

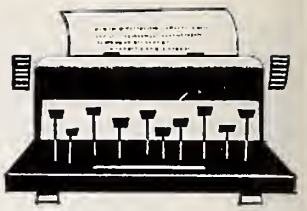
March 29-31, 1965—American Association for Thoracic Surgery, Roosevelt Hotel, New Orleans.

National

January 17-23, 1965—Eleventh Annual General Practice Review sponsored by the University of Colorado School of Medicine, Denver.

June 20-24, 1965—American Medical Association, Americana Hotel, New York City.

EDITORIALS



What's Up at the '65' General Assembly

THE 45-day legislative session of the 1965 General Assembly will convene on January 11th. Many new faces will answer the first roll call, but for the most part it will remain a veteran assembly, Democrat by party make and conservative in its orientation.

Many problems will confront the next General Assembly, not the least of which will be court ordered reapportionment of the House, and the appropriation of the State's budget for the next two-year period.

Implementation of MAA

The Medical Association of Georgia will present an ambitious legislative program of its own in January. While not a specified part of its legislative program, a high priority item will be the appropriation of State matching funds for the implementation of the MAA phase of the Kerr-Mills program in Georgia.

The bulk of the MAG legislative program will consist of three major proposals, two of which MAG will sponsor and one of which will have its full support and cooperation. These will be anti-child abuse legislation and a voluntary sterilization act, both of which MAG will sponsor, and a traffic safety bill based on tighter control of the issuance of driver's licenses to aged applicants. This latter item, it is anticipated, will be sponsored by an agency of State government. Let's look at each of these separately.

Child Abuse

Statistical data compiled over the past few years presents a disturbing picture of the rate and frequency of deliberate child abuse on the part of some parents, guardians and others charged with the welfare of children. The purpose of this bill would be to establish a mandatory reporting procedure in all suspicious cases of child abuse and at the same time grant to physicians and others required to make such reports both civil and criminal immunity under the act.

The second major bill in the MAG legislative program will be a proposal in the field of voluntary sterilization. Like the anti-child abuse bill, this proposal is a product of the 1964 MAG House of Delegates. It stems in part from an awareness that the present eugenic sterilization statute is both inadequate and out-of-date. It follows naturally then that this bill would repeal the eugenic sterilization statute presently in force.

On the positive side this voluntary sterilization bill would set up and clearly define the legal requirements necessary for the performance of a sterilization procedure. In addition it would give unmistakable legal status to such procedures when performed pursuant to the provisions of the act.

Road Test Exam

Legislation to require a road test examination for all applicants for a drivers license who have attained age 55 is a distinct possibility. An outgrowth of the address given by incoming MAG President, J. G. McDaniel, at the last Anual Session, this proposal, if it becomes legislation, will be sponsored by the State Traffic Safety Committee. MAG made the above recommendation to this Committee at a public hearing in October. It is presumed that this recommendation will constitute a part of an omnibus traffic safety bill to be drafted and sponsored by the State Traffic Safety Committee.

In addition to these major proposals it would seem reasonable to assume that MAG will continue to face a number of bills sponsored by cultists and fringe groups bent on obtaining statutory authority to invade the practice of medicine. These can usually be anticipated in a general sense. But to zero in on any one of them usually requires that we wait until such bills are dropped in the hopper.

The Status of Therapy for Hypertensive Disease in Georgia

There are many reports in the recent medical literature indicating that hypertension can be controlled in the majority of patients, that it should be treated early, and that many of the complications of hypertensive disease can be prevented. These reports have come from highly selective populations, mainly large research clinics which treat cooperative patients at little or no expense. What about the average patient being treated by his private physician in the office?

Discontinuance of Drugs

Recently the Georgia Department of Public Health has surveyed a random population to determine the incidence of hypertension and then has checked the private physician's records on these individuals and determined their treatment status. Fourteen per cent of the population age 15 or over had diastolic blood pressure levels that averaged 95 mm of mercury or above. Approximately one-fourth of these on repeated examination were determined to be labile hypertensives and eventually were shifted to the normotensive group. Thirty-one per cent of the hypertensive group were unaware that their blood pressure was elevated. Of these who knew they had high blood pressue, 30 per cent were currently on treatment. The majority of those who had been on treatment in the past said they had discontinued the medicines because, "they didn't know they were supposed to continue," or "they felt better."

A tabulation of doctors' office records found on the hypertensive subjects showed that of those the doctors had put on drug therapy, only 17 per cent returned regularly throughout the remainder of the record to have their blood pressure checked and treatment continued. Another 21 per cent returned at irregular intervals. Sixty-six per cent of those put on drugs by their doctor did not return for follow-up more than once or twice, or never returned and therefore probably discontinued therapy shortly after it was started. The blood pressure values recorded in the doctor's office after treatment showed that drug treatment was quite effective in lowering the blood pressure in the majority of patients who returned regularly for follow-up.

These results indicate that many people with high blood pressure are unaware of this fact and that a large percentage started on drug treatment do not continue it. This is not surprising and certainly agrees with the general impression of practicing physicians regarding hypertensive therapy.

Public Education

There is a need for public education on the nature of hypertensive disease. Physicians should emphasize to their patients that high blood pressure is a chronic disease requiring life-time observation and control. It should also be stressed that this disease is asymptomatic in the majority of cases and can only be detected by measurements of the blood pressure.

The mortality and morbidity from hypertensive disease has definitely decreased during the past ten years both in Georgia and throughout the nation. But, in view of these observations on a random sample of hypertensives under private care, this can be considerably improved.

Joseph A. Wilber, M.D., Associate Director
Cardiovascular Disease Control Service
Georgia Department of Public Health

Medical Education Conference to be Held in Georgia

Georgia's two medical schools, The Medical College of Georgia, Augusta; and Emory University School of Medicine, Atlanta; in cooperation with the Medical Association of Georgia, will sponsor a Medical Education Conference to be held January 29-31, 1965, at Calloway Gardens, Pine Mountain, Georgia. Included will be 15 doctors from the Medical College, 15 doctors from Emory Medical School, and 30 private practitioners from throughout the state of Georgia.

The purpose of the conference is to discuss problems of mutual concern to the medical schools and physicians in private practice. Three keynote speakers, Dean Harry B. O'Rear, M.D., Medical College, Augusta; Dean Arthur P. Richardson, M.D., Emory Medical School, Atlanta; and Thomas Goodwin, M.D., Augusta, MAG Medical Education Committee Chairman, will open the session with an introduction of topics to be highlighted during the three days. Of interest to the participants will be

"Problems of the State-supported Medical School;" "Problems of the Private, Urban Medical School;" and "What the Practicing Physician Wants of the Medical School."

Discussion groups will be composed of a group leader, a recorder and four members each from the representative bodies. Discussion topics will range from, "Should medical schools be staffed by general practitioners?" to "Can comprehensive medicine be properly taught by specialists in basic sciences and clinical fields?"

In addition to the group discussions and luncheons, the meeting will have as special guest speakers representatives from the AMA Council on Medical Education, and the Amreican Association of Medical Colleges.

Dr. J. G. McDaniel, MAG President, will conclude the program at a General Session on Sunday, January 31st, with an evaluation of the meeting.

NEW ORLEANS GRADUATE MEDICAL ASSEMBLY TO BE HELD IN MARCH

The twenty-eighth annual meeting of The New Orleans Graduate Medical Assembly will be held March 8, 9, 10 and 11, 1965, with headquarters at The Roosevelt Hotel.

Nineteen outstanding guest speakers will participate and their presentations will be interested to both specialists and general practitioners. The program will include 55 informative discussions on many topics of current medical interest, in addition to clinicopathologic conferences, symposia, medical motion pictures, round-table luncheons and technical exhibits.

Details of the New Orleans meeting are available at the office of the Assembly, Room 1528, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

"BUSINESS SIDE OF MEDICAL PRACTICE" AND MEDICAL UNITS 'PLANNING GUIDE' STILL AVAILABLE TO INTERESTED DOCTORS

Because of the overwhelming response to MAG's offer of the American Medical Association-Sears Roebuck Foundation, Inc. booklets offered free of charge to Georgia doctors, the Headquarters office has obtained more copies of each and is anxious to reach still more of those who might be interested.

Each booklet, constructed of heavy vellum stock, measures approximately 12" x 9" and contains charts, graphs, illustrations, floor plans, etc. Both are made for easy handling and make a nice addition to a doctor's office library.

Either or both, "The Business Side of Medical Practice," and the "Medical Units 'Planning Guide'" may be obtained by writing to the *Medical Association of Georgia, 938 Peachtree St., N.E., Atlanta, Ga. 30309.*

1965 ATLANTA GRADUATE MEDICAL ASSEMBLY FEATURES ILLUSTRIOUS GUEST ROSTER

Of interest to all Georgia physicians is the 1965 Atlanta Graduate Medical Assembly, to be held February 15, 16 and 17 at the Atlanta Biltmore Hotel. Following in the wake of the success of the 1964 program, a similar program is offered in February, 1965:

Monday, February 15
A Day of Medicine

Chester S. Keeger, M.D. — Boston
Albert I. Mendeloff, M.D. — Baltimore
William H. Crosby, M.D. — Washington
Henry D. McIntosh, M.D. — Durham
Philip K. Bondy, M.D. — New Haven

Tuesday, February 16
A Day of Surgery

George Crile, Jr., M.D. — Cleveland
Rene Menguy, M.D. — Lexington
G. V. Brindley, M.D. — Philadelphia
George T. Pack, M.D. — New York
Amos R. Koontz, M.D. — Baltimore

A Day of Cardiology

Jeremiah Stamler, M.D. — Chicago
Jerome H. Kay, M.D. — Los Angeles
Richard G. Lester, M.D. — Richmond
Mary Allen Engle, M.D. — New York

Wednesday, February 17
A Day of Obstetrics and Gynecology

Obstetrics:
Gordon W. Douglas, M.D. — New York

Gynecology:
Roger B. Scott, M.D. — Cleveland

A Day of Pediatrics

Audrey K. Brown, M.D. — Charlottesville
Donald Fraser, M.D. — Toronto

A Day of Orthopedics

William H. Bickel, M.D. — Rochester, Minn.

The Assembly is sponsored by the Fulton County Medical Society. We are proud of the outstanding faculty for the 1965 session. Plan now to attend. For further information contact Mrs. B. W. Shafer, Executive Secretary, 875 W. Peachtree Street, N.E., Atlanta 30309.

PRESIDENT'S LETTER

CHRISTMAS THROUGH THE AGES

When I thought about the President's Page at this season, for some reason I wondered who set the date for Christmas as December 25. When Christ was born there was no official calendar as we know it today. I asked some of my patients who are ministers and my own preacher. They all commenced talking in circles, the same as we and the lawyers do, when we do not know the answer. They lent me books by Schauffleur, Wagenknecht and others who had wondered about this before I was born.

From Heathen Mythology

It seems Christmas when it was first celebrated in the second century was taken from heathen mythology and customs. The pagan nations of antiquity always had a tendency to worship the sun as the giver of light, warmth and life. One of their greatest festivals usually took place after the winter solstice, the shortest day of the year. This was the turning point of Winter; the sun commenced shining longer each day and was the first step toward Spring. This holiday was called Saturnalia among the Romans and was a time of feasting for eveyone, including slaves. Gifts were exchanged.

The ancient Goths and Saxons called this the festival yule. The ancient Teutons celebrated the season by decking a fir tree to commemorate the sun rising higher and higher in the heavens. They decorated it with golden apples, nuts and balls to symbolize the sun and moon and the stars; they hung on it miniature figures of animals to symbolize sacrifices to the sun god.

The Giver of Light

As Christianity developed, the church embraced and encouraged many of the popular customs and festivals—after all it would not be practical to recommend the abolishment of the feast of the solstice that had taken place for generations. Why not substitute Christ for the sun as a giver of light, warmth and life, which is what all Christians believe.

This, of course, was a long drawn-out process. No one knows the birthday of Christ; there is little or no indication in the scriptures as to the season. I read somewhere once that in the fourth or fifth century, some high ranking Christian in Italy decreed it to be December 25. Historians disagreed as to this time of year, because they said that it would then have been in the rainy season and shepherds would not be in the fields tending their sheep. This technicality has made little difference, because as Christianity spread over the world this season, sometime near the solstice, came to be celebrated as the birthday of Jesus.

Celebration during this season probably reached its height in England from the seventh to the sixteenth century. It is recorded that even in Anglo-Saxon days there was high revelry from December 16 to January 6. It was during this period of celebration in 878 that the Danes surprised Alfred, the Great, and destroyed his army, forcing him into exile.

Threatened Existence

With the rise of Puritanism in England, however, the very existence of this holiday and festive season was threatened. The holy days of the English Church such as Christmas, Easter and Whitsuntide were abolished by the English Roundhead Parliament in 1643. They disliked intensely the "wanton Bacchanallian Christmases" spent throughout England as Cotton said in "revelling, dicing, carding, masking, consumed in compotations, in interludes, in excess of wine, in mad mirth." When this country was founded, Christmas was a day of work for all. Shops were open. There was an anti-Christmas feeling. In 1659 the General Court of Massachusetts enacted a law, "Anybody who is found observing, by abstinence of labor, feasting, or any other way, any such day as Christmas Day, shall pay for each such offense five shillings."

The Puritans soon lost their control of Parliament, however, and the English Christmas was restored. It was a bitter pill to Puritans in England and in

our colonial settlement. There was a great deal of criticism and animosity toward the Church of England for establishing Christmas services in Boston some years later. It must be said, however, that in certain localities, such as old Narragansett, an opulent community which was settled by Episcopalians, two weeks of Christmas visiting and feasting were entered into with zest by both planters and slaves during most of this time.

The Christmas season is now celebrated throughout the Christian world. It is a time of gladness, happiness and good cheer. It warms the cockles of the heart of the young and old, the rich and the poor, the saint and the sinner. That is as it should be. I love Christmas with Santa Claus, the togetherness of the family, a visit with the neighbors, the church service and all those things. However, since I've been reading about the history of Christmas and thinking about how commercial it has come to be, the words of the old Puritan Prynne keep coming back to my mind. He complained 400 years ago that the England of his day had degenerated and could not celebrate Christmas or any other festival "without drinking, roaring, healthing, dicing, carding, dancing, masques and stage plays . . . which Turks and infidels would abhor to practice."

HOW DOES YOUR ASSOCIATION BENEFIT YOU?

Membership in the Medical Association of Georgia provides numerous benefits for physicians.

The privileges of membership include voting, holding office, and the receipt of the *Journal of the Medical Association of Georgia*. Included as a supplement to the January issue is an annual membership Roster, which contains an alphabetical listing of physician members, a county medical society listing of members, and a list of MAG and state medical committees.

Association benefits include the Annual Session, the 111th to be held May 2-4, 1965, at Augusta, where doctors may further their scientific education, participate in conducting Association business, and enjoy the fellowship of their collegues.

A group insurance program is available and includes Health and Accident; Catastrophic Hospital Insurance and Home Nurse; and Term Life. Professional Liability coverage is available on an individual basis.

An attorney who serves as counsel to MAG is available for matters affecting the entire profession.

Biographical data of each member is maintained in a complete confidential file and is available upon authorization.

An aid to doctors seeking professional location and to communities desiring a doctor is maintained by the Physician Placement Bureau.

A Visitation Program provides that a member of the MAG staff visit local county societies annually.

A Speakers Bureau serves county and district societies and lay organizations seeking a spokesman to discuss scientific or non-scientific medical subjects.

On request, the Association renders secretarial assistance to speciality societies in scientific and organization matters.

In essence, the Medical Association of Georgia, working with its 40 special committees on problems relative to the practicing physician in Georgia, serves as a socio-economic clearing house for members. The privileges and services are yours for the asking with your membership in the Association.

AMA APPOINTS PANEL OF NURSE CONSULTANTS

The American Medical Association has announced the appointment of an ad hoc panel of professional nurse consultants to serve as advisors to AMA's Committee on Nursing.

The panel, which held its first meeting October 16 in Philadelphia, will inform the Committee of recent trends in nursing education and service and offer advice on future programming. In turn, the Committee will acquaint the panel with AMA programs and activities in the nursing area.

Arthur A. Kirchner, M.D., Los Angeles, Committee Chairman, said, "The appointment of this ad hoc panel of experts on nursing education and service reaffirms the Committee's objectives of protecting and fostering an enduring alliance of understanding between the two major health professions.

"This action demonstrates the intent of the medical profession to work closely with its nursing colleagues toward the ultimate goal of optimal patient care and thereby strengthening the physician-nurse relationship."

Panel representatives of nursing education are:

Etta Rasmussen, R.N., teacher-educator, College of Nursing, State University of Iowa, Iowa City.

—Wilma Hiatt, R.N., chairman, Department of Nursing, Amundsen Junior College, Chicago.

—Ruth Sleeper, R.N., director, School of Nursing and Nursing Service, Massachusetts General Hospital, Boston.

—Helen Nahm, R.N., Ph.D., dean, School of Nursing, University of California, San Francisco Medical Center, San Francisco.

Representatives of nursing service include:

—Ella Allison, R.N., director of nursing, Albert Einstein Medical Center, Philadelphia.

—Florence Julian, R.N., director, nursing service, University of Minnesota Hospitals, University of Minnesota, Minneapolis.

—Dorothy Rusby, R.N., director, Visiting Nurse Association of Cleveland, Cleveland.

—Anna E. Ryle, R.N., director of nursing, Grace-New Haven Community Hospital, New Haven, Conn.

ANORECTAL CANCER

Henry Finch, M.D., *Atlanta*

PHYSICIANS! PATIENTS! Don't pay any attention to that severe chest pain! It may be nothing serious or it may be due to a heart attack. PHYSICIANS! PATIENTS! Don't pay any attention to rectal bleeding! It may be nothing serious or it may be due to a cancer of the anorectal sigmoid area.

77.2 per cent of all intestinal cancers are in the anorectal area. Carcinoma of the anorectal sigmoid area represents the most frequent form of internal malignancy. It is readily diagnosable by inspection, palpation, anosigmoidoscopy and X-ray. It is estimated, based on over 10,000 cases reported in the literature, that 80.4 per cent of all intestinal cancers can be seen through sigmoidoscope. Radical surgery with early carcinoma of the rectum and colon gives the highest cure rate of any internal cancer in the body.

Symptoms

Bleeding either bright or dark blood is the most frequent and outstanding symptom of cancer of the lower colon. Every patient who presents himself with rectal bleeding should, therefore, have an anosigmoidoscopic examination before any local therapy is instituted. Any change in bowel habit, a feeling of urgency, incomplete evacuation, and pain in the lower rectum and back are some of the other symptoms that demand an anosigmoidoscopic examination.

Excellent results can be obtained in the management of carcinoma of colon and rectum if the early detection through routine anosigmoidoscopic examination is performed. Colon resection abdominoperineal or "Pullthru" are the treatments of choice.

Polypoid Growths

These may be single or multiple, sessill or peduncutated adenomatous growths of the mucous membrane. Various reports place incidence of polypoid growths found on routine anosigmoidscopic exam from two to 11 per cent. When they are found, a barium enema with air contrast studies becomes mandatory. How many of these polyps become malignant is uncertain, but it is certain that a polyp that has been removed cannot become cancerous. When these polyps are found with the sigmoidoscope they should be removed through the sigmoidoscope. When polyps are found with barium enema, they should be removed transabdominally.

If every physical will include inspection, palpation and anosigmoidoscopic examination, instead of more people dying from anorectal colon cancer than any other cancer, more people will be cured than from any other internal cancer in the body.

490 Peachtree Street N.E.

Approved by the Professional Education Committee, Georgia Division, ACS.

GENERAL PRACTITIONERS TO RECEIVE CREDIT HOURS FOR ALCOHOLIC REHABILITATION SEMINARS

The Alcoholic Rehabilitation Service, Mental Health Division, Georgia Department of Public Health has announced that the American Academy of General Practice has approved 39½ hours of credit for the one-week orientation program "Introduction To The Attitudes and Techniques Useful in Rehabilitation of the Chronic Alcoholic." The same program is repeated each week and will run through May, 1965.

This program is conducted at the Georgian Clinic under the direction of Vernelle Fox, M.D. on a grant from the Division of Community Health Service, U. S. Public Health Service. It is designed for physicians and professional people who come in contact with the alcoholic and his family in their general practice.

For details and further information write or call Dr. Vernelle Fox, Director, Georgian Clinic — Rehabilitation Center, 1260 Briarcliff Road, N.E., Atlanta, Georgia 30306. Telephone 873-5341.

HYPERCHOLESTEROLEMIA

Pat Roche, Jr., M.D., *Dublin*

STUDIES of lipid metabolism have been numerous in recent years and have been designed to determine the importance of fat in the production of atherosclerosis. The cholesterol fraction in particular has been studied and its metabolism worked out. Usually not more than 25 per cent of the serum cholesterol is derived from the diet. By far the major portion of the cholesterol in the serum is synthesized in the liver. The liver is able to step up production of cholesterol when one goes on a low cholesterol diet, thus modifying the expected decrease in the serum cholesterol level. The liver is also responsible for excreting cholesterol and its catabolic products. Much of the cholesterol is oxidized by the liver into bile acids which are excreted via the biliary system into the intestine and then largely reabsorbed again. Some 85 per cent of the cholesterol synthesized is excreted as bile acids, the majority of which is absorbed again with only an estimated .8 grams daily being lost in this recycling.

Relationship Well-Established

Statistically the relationship between an elevated level of cholesterol and an increased risk of coronary artery disease appears to be well-established. Abnormalities of other fractions of lipid metabolism (triglycerides and free fatty acids) may also be of value in predicting a coronary prone individual but most of the data collected thus far relates only to the cholesterol component. Perhaps the best known study of coronary artery disease is being carried out in Framingham, Massachusetts, by the U. S. Public Health Service, a study now in its fourteenth year. It has been shown that an elevated cholesterol level in men aged 40-59 carries a threefold increase in risk of development of coronary artery disease whereas this finding in women is of much less prognostic significance. In women there is only a slightly increased incidence of coronary artery disease associated with hypercholesterolemia.

Drugs and Diet

One might infer that if an elevated level of cholesterol leads to an increase in coronary heart disease, a prolonged reduction in the serum cholesterol should prevent or delay the appearance of the initial coronary episode. Many drugs and dietary regimens have been developed reflecting the hope that such an approach will be beneficial. Some drugs currently available and experiencing varying degrees of popularity include nicotinic acid, sitosterol, estrogenic hormone, thyroid hormone or its analogues, and heparin. Diets have had even wider use, perhaps the most popular being one that lowers the total fat some 20 per cent with the liberal substitution of fats rich in polyunsaturated fatty acids.

Despite the use of drugs and diet to alter the natural history of atherosclerosis by lowering the cholesterol level, many physicians have experienced doubt and disappointment as to the efficacy of their efforts. Although it remains an unproven thesis that prolonged lowering of the cholesterol level will result in a significant reduction of atherosclerosis, one continues to hope that in the future some such agent will be developed which will favorably reduce the manifestations of arterial disease without producing significant side effects. Until such time as positive evidence is obtained, the decision as to what therapy to use and how vigorously to pursue it will remain a difficult one.

606 Academy Avenue

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

BRIGHT FUTURE IN MENTAL DISEASE PREVENTION

The keys to the rapid progress we are making in the management of emotional disturbances are the new drugs and the treatment techniques which are at our disposal. We now measure treatment in terms of days, weeks, or months instead of years and decades. These medical advances also mean that the psychiatrist no longer stands alone — all physicians, regardless of specialty, have tools and knowledge enough to diagnose and manage many forms of mental illness. Nor have we yet really touched prevention's great potential. — Millard B. Bethel, M.D., in *Hawaii Medical Journal*, January-February, 1964.

IF...

Leonard T. Maholick, M.D., *Columbus*

If the discharged mentally ill can receive good follow-up medical care, most of them can return to their homes and remain there. Without proper medical attention, many of them, as much as 35 per cent according to some studies, will relapse and return to the hospital.

To cope effectively with psychiatric disorders and to enjoy the work at the same time, it is essential to be prepared with at least the following items in mind.

1. A "TALKING" ROOM. Communication is a basic tool in medical practice, especially so in managing the mentally ill. A quiet, pleasant room with comfortable chairs and privacy is an asset to patient and doctor alike.

2. TALKING TIME. Patients need time to talk and the physician needs time to listen. Time is costly, but patients will pay the fees if the charges are explained. The interview should be structured carefully as to content and time limits. A well-organized 15 or 25 minute conference can be quite effective.

3. DATA COLLECTION. Knowing the patient is a necessity. This task can be lightened considerably if the physician uses any one or a combination of the following self-administered questionnaires: (a) the Record of Medical History, a detailed questionnaire covering all medical aspects of the patient's background; (b) the Cornell Medical Index Questionnaire, a rapid method of evaluating both the patient's physiological and psychological state; (c) the Cornell Index, a device for screening psychiatric disability; and (d) the Mooney Problem Check List, which itemizes 288 common problems so that the patient can check those that concern him.

4. PSYCHOTROPIC DRUGS. The physician must know a great deal about the uses and abuses of the tranquilizers, especially the phenothiazines, and the anti-depressants. Most discharged patients need a maintenance dose of the phenothiazines. The dose must be adequate, often large by usual standards, and maintained for long periods—months and even years. According to some controlled studies, the relapse incidence can be reduced almost one-half by maintaining patients on adequate, prolonged courses of anti-psychotic drugs.

5. COMMUNITY HELPING RESOURCES. The physician should investigate services provided by the Family Service Agency, Welfare Department, Home for the Aged, Division of Vocational Rehabilitation, Public Health Department, community psychiatric clinics, and others. He also needs to learn how the talents of social workers, psychologists, and ministers can help.

6. THE PSYCHIATRIST. Finally, a good consulting relationship, even if only by phone, with an acceptable psychiatrist can be helpful. When should the psychiatrist be called? He should be summoned when the physician: (a) has difficulty understanding the disease process itself or the personality and/or behavior of the patient; (b) is indecisive about the management of a particular case, no matter what or whom it involves; (c) has difficulty with drugs, or (d) feels that the psychiatrist's special therapeutic skills and techniques are needed.

The Bradley Center, Inc.
1327 Warren Williams Road

Prepared at the request of the Sub-committee on Mental Health of the Medical Association of Georgia.

MEDICAL COLLEGE OF GEORGIA RECEIVES GRANT FOR NEW HEALTH RESEARCH FACILITIES

The Medical College of Georgia has been awarded a $161,000 federal grant for the development of new health research facilities. The grant, announced June 12 in Washington by the National Institutes of Health, will be matched with some $135,000 in state funds for the construction of animal housing quarters to be built at Gracewood State School and Hospital.

The $296,000 facility, which will be located on property deeded to the Medical College by an executive order of Governor Carl E. Sanders, will be operated solely by the college as a part of the institution's research complex. The unit will be designed to provide adequate and economical space for animals undergoing lengthy studies, and will allow some investigative procedures to be performed at the site. Like other animal facilities which will remain on the medical campus, the new structure will be supervised by Dr. Charles R. Wallace, Assistant Research Professor of Physiology and Director of Veterinary Services.

ABSTRACTS BY GEORGIA AUTHORS

Engler, Harold S., M.D.; Ronald A. Freeman, B.S.; Chester B. Knavaga, M.D.; Lynn L. Ogden, M.D.; and William H. Moretz, M.D., Medical College of Georgia, Augusta, Georgia, "Production of Gangrenous Extremities by Intra-Arterial Injections", Am. Surgeon 30:602-607 (Sept.) 64.

The loss of portions of the upper extremity in several patients aroused our curiosity regarding the sequence of events that lead to gangrene after the accidental intra-arterial injection of drugs.

Our first attempts to produce gangrene experimentally failed until the injection of medication was combined with a period of arterial occlusion.

A technic of injecting drugs intra-arterially was then developed which routinely caused tissue necrosis.

Sparine, ether, BSP and Dexedrine injected after a period of arterial occlusion caused gangrene but when injected without arterial occlusion did not produce gross injury.

Microscopic study revealed a slight, transient inflammatory response with mild congestion and edema on the control side, while on the experimental side similar but much more severe changes were progressive and led to intravascular thrombosis and gangrene.

Intravascular casts made during the 24 hours after injection demonstrated the gross vascular occlusions well and corroborated the gross and microscopic observations.

It is apparent that to be successful in preventing gangrene after this type of injury is sustained, treatment would have to be begun early, probably within the first few hours. It is hoped that further studies will suggest better means of treatment or of prevention.

Skandalakis, John E., M.D., Ph.D.; Stephen W. Gray, Ph.D.; and Duncan Shepard, M.D., Piedmont Hospital, Atlanta 9, Georgia, "Smooth Muscle Tumors of the Small Intestine", Am. J. Gastroenterol. 42:172-190 (Aug) 64.

An analysis of over 700 cases of smooth muscle tumors of the small intestine is presented, and six new cases from Atlanta hospitals are used to illustrate the chief features of these tumors. Most intestinal leiomyomas and leiomyosarcomas are found in the jejunum; and most are in patients between 50 and 60 years of age. The tumors are exo-enteric more often than endo-enteric. Central necrosis with hemorrhage is a frequent development in large tumors.

Intestinal smooth muscle tumors are not common and hence, are often mismanaged. There are no pathognomonic signs or symptoms; a diagnosis of intestinal neoplasm is the best that can be hoped for by present methods.

About one third of leiomyosarcomas metastasize, usually by implantation to serous membranes in the abdomen. A few may metastasize to the lungs. Recurrence after surgery is less common in the small intestine than in the rectum.

The possibility of metastasis or recurrence coupled with a lack of clear histological criteria of malignancy make radical resection the only safe treatment. We prefer resection of ten cm. of "healthy" intestine on either side of the tumor with resection of associated mesentery and the omentum.

Thornton, H. A., Jr., M.D., P.O. Box 326, Greensboro, Georgia, "New Infant Nursing Bottle with Angle Neck", Postgrad. Med. 36:174-177 (Aug.) 64.

The new angled neck infant nursing bottle* has markedly reduced strangling, colic, and chronic spitting when these problems were due to improper feeding technics. (A study of over 100 cases shows over 90 per cent effectiveness.) By design the neck of this bottle is angled so that when inverted for feeding, the nipple is horizontal, rather than dependent as with straight bottles. This angulation of the neck of the bottle places the nipple in a position then, comparable to that of the breast nipple. True upright positioning of the nursing infant is achieved, as opposed to the supine position necessary to nurse a straight bottle with its dependent nipple.

The supine position of the infant during bottle feeding results in forced feeding and causes the infant to strangle, gulp and swallow air. This produces crying, colic, and chronic spitting. Positional otitis media requiring surgery may also develop in the infant fed in the supine position.

Although recognized that supine positioning of the nursing infant creates problems, no effort has been made before to correct the mechanics of the bottle to prevent these problems from developing. Using the new bottle, the infant now may just face the bottle instead of mother's breast.

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*Angled neck nurser is known as the CORECTO® Nurser.

Pennington, C. L., Jr., M.D., 829 First Street, Macon, Georgia, "Glottic and Supraglottic Laryngeal Injury and Stenosis from External Trauma," Laryngoscope 74:317-345 (March) 64.

External laryngeal trauma is replacing internal laryngeal trauma and disease, as a basis for laryngeal stenosis. This has come about partly because of the control of the specific infections which initiated laryngeal stenosis and partly because of improved and more sophisticated techniques in handling the endolaryngeal tissues. Automobile and other vehicular accidents account for most cases of external laryngeal trauma. The surgeon at present can do little to decrease the incidence of external laryngeal trauma beyond advocating safety factors in automobile construction.

A review of the literature has confirmed the impression that most often external laryngeal injuries result in glottic and supraglottic stenoses in contra-distinction to the inflammatory subglottic stenoses of past decades. Early threapy of laryngeal injuries, using a polyethylene tube or an internal acrylic splint with a supraglottic keel, is advocated to maintain the laryngeal lumen and separate markedly hypertrophic, hemorrhagic and denuded aryepiglottic folds, ventricular bands, and vocal cords. The specially adapted acrylic mold has proven most satisfactory for long term care, while polyethylene tubing is advocated as a splint in the early stages of laryngeal injury. The Jackson and O'Dwyer molds modified in acrylic have not proven satisfactory in the author's cases of massive ventricular hematoma and denudation of mucosa. In cases of supraglottic hypertrophic cicatricial laryngeal stenosis, thyrotomy, submucosal dissection of scar tissue, and placement of an acrylic mold and keel has been used. The mold and keel were necessary to retain a satisfactory lumen with separation of hypertrophic, denuded ventricular folds, aryepiglottic folds, and epiglottic edges. Submucosal dissection of scar tissue obviates the use of skin graft in all but the most extensive cases. Normal respiratory membranes cover the excised and denuded areas leaving the laryngeal surfaces with a functional mucosal covering.

Zuspan, Frederick P., M.D., and Mary Carolyn Ward, M.D., Medical College of Georgia, Augusta, Georgia, "Treatment of Eclampsia", South. M.J. 57:954-959 (Aug.) 64.

Forty-nine eclamptic patients were studied since the opening of the Eugene Memorial Hospital in 1956. Treatment regimes were evaluated as well as fetal mortality and maternal mortality. Thirty-four primigravida patients and fifteen multigravida patients comprised this series but were further subdivided into eight white and 41 non-white patients. The onset of eclampsia was prepartum for 47 patients and postpartum for seven patients. Two maternal deaths were reported in this series (4%) and the uncorrected fetal mortality was 36 per cent.

The amount of magnesium sulfate deliverd by the intravenous route was evaluated. It was noted that when more than one gram of magnesium sulfate was given intravenously per hour that the over-all fetal survival was considerably increased. The inception of this treatment regime has been recent and only eight patients were treated in this manner. Of those patients who presented with a living child on admittance, all eight patients who received more than one gram of magnesium sulfate per hour delivered viable infants whereas the over-all fetal survival rate in the remaining group was 66 per cent.

A treatment outline is included indicating weeks of gestation, improvement

or no improvement, and fetal prognosis. It is emphasized that therapy should be individualized, delivery should be by induction with an amniotomy and intravenous oxytocin. Patients should be sectioned for obstetric indications only. Hypotensive and diuretic therapy is potentially dangerous in these patients. It is fortunate that the Medical College of Georgia is particularly interested in the treatment and study of the eclamptic patient and serves as a state referral center for such complications of pregnancy. The primary weapon in the treatment of eclampsia should be in prevention, but once it has developed, the use of intravenous magnesium sulfate is the prime agent of choice and all other medications should be minimized and considered ancillary.

Torpin, Richard, M.D.; George T. Miller, Jr.; and B. W. Culpepper, Medical College of Georgia, Augusta, Georgia, "Amniogenic Fetal Digital Amputations Associated with Clubfoot," Obst. and Gynec. 24:379-384 (Sept) 64.

Case report of newborn female infant malformed in the fingers of right hand and toes of both feet especially of the right, club-foot more on the left. The malformation of the digits consisted of amputations and constricting bands. Study of the placenta revealed that the amnion had early ruptured and detached itself to a small orange sized sac at the base of the umbilical cord. In so doing it had obviously pulled off from the chorion multiple fine fibrous strings of a few centimeters in length. Some of these remain upon the outside of the amniotic sac and also upon the inside of the amnion-denuded chorionic sac. These apparently were swept up by, and entangled the fetal fingers and toes. It is postulated that most of such instances are the result of premature rupture of the amnion without damage to the chorion. The clubbing of the feet in such instances is suggested to be due to temporary resorption of the amniotic fluid after rupture of the amnion. This is the first demonstration of the origin of the long questioned "amniotic strings."

Thomas, Robert P., M.D., Medical College of Georgia, Augusta, Georgia, "Effect of Third Cranial Nerve on Intraocular Pressure," Arch. Ophthal.

Intracranial ablation of the third cranial nerve in dogs resulted in an ipsilateral ocular hypotonia frequently apparent within 30 minutes following operation. The most profound hypotonia was noted during the first postoperative week.

Five of the nine animals followed longer than one week had a significant ipsilateral ocular hypotonia for the duration of the experiment. The effect is believed to be related to the interruption of the parasympathetic outflow to the eye contained in the third cranial nerve.

Tonographic studies would indicate that the initial hypotonia was related to a reduction in the rate of aqueous formation. By the twentieth postoperative day, the rate of aqueous formation had returned to normal. The facility of outflow, however, was almost double preoperative mean values by the twentieth postoperative day.

Huguley, Charles M., Jr., M.D., Emory Hospital 22, Georgia, "Agranulocytosis Induced by Dipyrone, a Hazardous Antipyretic and Analgesic," J.A.M.A. 189:938-941 (Sept 21) 64.

Since 1960, reports of 18 cases of agranulocytosis associated with dipyrone have been received by the AMA Registry on Adverse Reactions. Seven of these were children. Thirty-six per cent of these patients have died. The striking, recent increase in the use of dipyrone is puzzling since the drug has the same pharmacologic effects and therapeutic indications as aminopyrine of which it is a derivative. Aminopyrine, however, is seldom used. It may be suspected that many physicians who prescribe dipyrone are unaware that it is almost identical pharmacologically to aminoyprine. Sulfonation of aminopyrine to dipyrone renders it more soluble without affecting other properities. The chemical names, however, are different and in addition aminopyrine is often referred to as amidopyrine and dipyrone is still available under the name, methampyrone.

Information available would indicate that long, continued use of aminopyrine carries a risk of agranulocytosis of 0.86 per cent and a mortality risk of 0.63 per cent. It can be assumed that dipyrone would have a similar risk. Patients who have recovered from agranulocytosis following treatment with one of these drugs and then have been challenged with the other drug have all shown cross-reactivity.

There are practically no circumstances in which aminopyrine or dipyrone is indicated. In particular, dipyrone is not the treatment of choice for acute pyrexia in children.

Parrish, Robert A., M.D.; H. Turner Edmonson, M.D.; and William H. Moretz, M.D., Medical College of Georgia, Augusta, Georgia, "Duodenal and Biliary Obstruction Secondary to Intramural Hematoma," Am. J. Surgery 108:428-430 (Sept) 64.

Acute obstruction of the duodenum secondary to intramural hematoma is infrequent. The commonest cause for this entity would appear to be blunt abdominal trauma. The diagnosis may be suspected if nausea, vomiting and upper abdominal pain follow trauma to the abdomen. However, the abdominal signs are usually not severe enough to demand immediate exploration. In most cases the nature of the lesion will be ascertained only after gastrointestinal roentgenograms are made with barium showing the typical "coiled spring" sign. The treatment of choice is evacuation of the hematoma and closure of the incision. Drainage of the hematoma cavity is to be avoided. One case of blunt trauma is presented with duodneal obstruction and obstructive jaundice secondary to compression by an intramural hematoma of the duodenum.

Jennings, Edwin R., M.D., and B. A. Addison, M.D., 2432 Parkwood Drive, Brunswick, Georgia, "Simple Technic for Sternal Fixation in Repair of Pectus Excavatum," Am. Surgeon 30:689 (Oct) 64.

In the repair of pectus excavatum many technics have been used for stabilizing the chest in the immediate postoperative period.

A suspension technic using a barb wire suture attached to an external frame is described.

An illustration of the technic and the use on a patient is evaluated.

Logan, William D., Jr., M.D.; W. C. Jordan, M.D.; Gerado Soracco, M.D., Emory University Clinic, Atlanta 22, Georgia, "Penetrating Cardiac Injuries," Am. Surgeon 30:664-667 (Oct) 64.

Penetrating cardiac injuries have been treated by two primary methods. One is by immediate open surgery and the other by initial pericardiocentesis. Both techniques have strong proponents. The penetrating cardiac injuries at Grady Memorial Hospital have been reported from 1936 to 1957. The present data gives a six year follow-up of an additional 30 cases, which gives a total of 138 cases documented and treated since 1936.

Earlier, the primary treatment was exploratory thoractomy but in 1946 primary treatment was changed to pericardiocentesis and this has continued. Since 1944, the over-all mortality with pericardiocentesis alone is 12 per cent and open surgical treatment is 62 per cent. Data and discussion are given concerning management of these injuries. Analysis of our results seems to justify continued use of pericardiocentesis as the primary treatment of penetrating cardiac injuries and cardiac tamponade.

Vaughan, Victor C. III, M.D., Medical College of Georgia, Augusta, Georgia, "Prophylaxis of Allergic Disease in Children," Ann. Allergy 22:468,674 (Sept.) 64.

Prophylaxis of allergic disease can aim at universal avoidance of highly sensitizing situations, at minimizing the chances of emergence of clinical allergy in potentially allergic individuals, or in allergic individuals at keeping the reactive base as narrow as possible.

Good medical practice includes the avoidance of highly sensitizing drugs when possible, the administration of some drugs, such as penicillin, by the oral route when this is permissible, and adequate prophylactic programs against tetanus and diphtheria. In some allergic families maternal diet pregnancy may warrant attention; breast feeding would appear to be the ideal nutrition for the young infant. The addition of solid foods of high sensitizing potential often takes place unnecessarily early and in response to social pressure rather than any real need of the infant.

When allergies appear, they should receive prompt and adequate treatment, directed not only at environmental and dietary control of demonstrated allergens but also at prophylactic measures with respect to substances of high sensitizing potential. One possibly important aspect of prophylaxis in asthma will be avoidance of tonsillectomy and adenoidectomy in children with partly allergic susceptibility to recurrent upper respiratory infection until it can be shown that adequate attempts to control the allergic element do not bring relief.

Prophylactic measures in the allergic family must be under constant review lest they become the focal points of struggle between parent and child in which undue anxiety or other emotions are generated which may make the attempt at a prophylactic regimen more hurtful than helpful.

THE ASSOCIATION

DEATHS

MURDOCK SYKES EQUEN, 72, founder and chief of staff of the Ponce de Leon Infirmary, Atlanta, died November 11, 1964, in an Atlanta hospital.

Dr. Equen, one of Georgia's most noted physicians, was the first surgeon to perform a laryngectomy in Georgia. He was famous for designing the "Equen magnet," a device for removing foreign objects from the body's air and food passages. For his specialized work in the field of the larynx, he was awarded the Thomas A. Edison Gold Award in 1944 for his contribution to the arts and sciences. A fellow of the American College of Surgeons and one of the 100-member American Laryngological Association, he is the author of a book published in 1957, *Magnetic Removal of Foreign Bodies.*

Born in New Orleans, he attended Vanderbilt University and received his medical degree from Emory University School of Medicine.

He was a diplomate of the American Board of Otolaryngology, and a member of associations and societies including the American Medical Association, American Broncho-Esophagological Association, American Larynogological, Rhinological and Atological Association, American Academy of Ophthalmology and Otolaryngology, Southern Medical Association, Medical Association of Georgia, Fulton County Medical Society and Atlanta Eye, Ear, Nose and Throat Society.

Dr. Equen was a communicant at the Cathedral of St. Philip. He was a member of the Piedmont Driving Club and Capital City Club. He was a member of the Kappa Sigma fraternity and the Kiwanis Club.

Dr. Equen was married to Miss Anne Hart of Atlanta in 1922. Surviving in addition to the wife are two children, Mrs. W. Perry Ballard and Mrs. Sebastian Miller, both of Atlanta; three sisters, Mrs. Equen Lehmberg, Columbus, Miss.; Mrs. Harry Westover, San Marino, Calif., and Mrs. Stanley Hall, Brooklyn, N.Y.; five grandchildren, four nieces, and a nephew.

THOMAS ARTHUR AMBURGEY, 44, of Savannah, died October 10, 1964, at a local hospital after having been stricken by a heart attack.

An orthopedic surgeon, he had practiced in Savannah since 1954. He had offices in the Medical Arts Center.

He was a member of Wesley Monumental Methodist Church and its board of stewards, the Rotary Club, the Savannah Golf Club, the Savannah Yacht and Country Club, the Georgia Medical Society, the Southeastern Medical Society, the American Medical Association and was a fellow of the American College of Surgeons and a diplomate of the American Board of Orthopedic Surgery.

A director of the Clair Henderson Memorial Rehabilitation Center and the Crippled Children's Center, he was also active in National Foundation activities.

A native of Hindman, Ky., he was a graduate of the University of Louisville Medical School, class of 1949. Before entering medical school, he served four years as a fighter pilot in the Marine Corps.

Following his graduation from medical school, he took internship and residence training in orthopedic surgery in Oakland, Calif., Columbia, S.C., and Charleston, S.C.

He was married to the former Miss Emily Harris of Leaksville, N.C. They had two children, Thomas Michael Amburgey and Susan Lee Amburgey.

Other survivors are his parents, Dr. and Mrs. Grover C. Amburgey of Hindman, Ky.; two sisters, Mrs. Margie Pritchett of Bradenton, Fla., and Mrs. Dorothy Curry of Delporton, W. Va.

SOCIETIES

BIBB COUNTY MEDICAL SOCIETY held a Middle Georgia Nutrition and Health Quackery Conference October 16 in Macon. In addition to a consumer panel made up of Maconites, guest speakers included a director of the Atlanta district of the U.S. Food and Drug Administration, a consultant in Health and Fitness for the American Medical Association, and a nutrition research assistant for the National Dairy Council.

David Robinson, M.D., Savannah, was installed as President of the FIRST DISTRICT MEDICAL SOCIETY at the group's annual banquet October 21.

John J. Deal, M.D., was elected and installed as the new President-elect, and Jeff J. Holliman, M.D., of Savannah is the new vice president.

Two officers were re-elected. They are Vincent J. Cirincione, M.D., of Savannah, Secretary, and L. Frank Lovett, M.D., of Statesboro, Treasurer.

GORDON COUNTY MEDICAL SOCIETY in cooperation with the Georgia Heart Association and the Gordon County Division of the Georgia Heart Association recently sponsored two public forums on stroke rehabilitation, designed for stroke victims and their families in an effort to help stroke patients recover at home. Speakers included Thomas L. Crews, M.D., Covington, "Strokes, the Cause and Effect;" John H. Stone, M.D., Atlanta, "Rehabilitation in the Home;" Mr. Charles B. Hackney, Atlanta, "Demonstration of Rehabilitation Techniques;" and R. D. Walter, M.D., Calhoun, President of the Gordon County Medical Society who presided.

Speaking at the scientific session of the October 1 meeting of the SECOND DISTRICT MEDICAL SOCIETY were Charles Finney, Albany, ophthalmologist, whose topic was "All in Favor Say Eye;" and Stuart C. Smith, M.D., of Tallahassee, Fla., dermatologist, who spoke on "Common Dermatoses."

Joe T. Christmas, Vienna, is the new President of the THIRD DISTRICT MEDICAL SOCIETY. Dr. Christmas was installed at the Fall meeting of the society held October 22 in Americus. Jack Hughston, M.D., Columbus, was elected President-elect, and R. A. Collins, Jr., M.D., Americus was re-elected Secretary-Treasurer.

Others named included Frank A. Wilson, III, M.D.,

Leslie, and Willis J. Jordan, M.D., Columbus, Councilors; Dr. Christmas and Luther Wolff, M.D., Columbus, Vice-councilors.

A scientific program for local and visiting physicians began at 3 p.m. with addresses scheduled by Linton H. Bishop, M.D., and Harold Harrison, M.D., Atlanta, and Jack Houston, M.D., Columbus.

The third annual Medical Symposium sponsored by the WHITFIELD COUNTY MEDICAL SOCIETY in cooperation with the Medical College of Georgia convened in Dalton October 15 and 16. The symposium was sponsored by a grant from Merck, Sharp & Dohme. Speakers representing the Medical College included Victor Moore, M.D.; Gerald W. Burroughs, M.D.; Hans J. Peters, M.D.; and Edwin L. Brackney, M.D. E. T. McGhee, M.D., and A. M. Boozer, M.D., of Dalton participated in the panel discussions.

PERSONALS

Second District

WARREN C. BAXLEY and JACK G. STANDIFER, Blakely, attended the annual scientific meeting of the Jackson-Calhoun County Medical Society at Marianna, Fla., October 12.

PIERPONT F. BROWN, JR., Gainesville, took a course in October offered at the Massachusetts General Hospital by Harvard Medical School. The course included panel discussions and symposia on the detection and treatment of cancer.

A full partnership in the practice of medicine has been formed by N. J. CROWE and FRED McLEAN, Sylvester, effective November 1.

Fifth District

The Georgia Pediatric Society held its 32nd annual scientific meeting October 8 at the Progressive Club, Atlanta. Speakers came from Miami, Utah, Texas and Birmingham, England. Officers of the society are RICHARD W. BLUMBERG, Atlanta, President; MARTIN H. SMITH, Gainesville, President-elect; PRESTON D. ELLINGTON, Augusta, Vice-president; LEROY ANTROBUS, Atlanta, Secretary-Treasurer, and JOSEPH YAMPOLSKY, Atlanta, Local Arrangements Committee.

BRUCE LOGUE, Emory University, Atlanta, has been named a Vice-President of the American Heart Association. He was elected at the annual association meeting in Atlantic City. THOMAS L. ROSS, JR., of Macon continues as a member of the national association's board of directors.

WILLIAM DAVIS, College Park, was guest speaker at the September luncheon meeting of the Floyd County Medical Auxiliary held in Rome. Dr. Davis' subject concerned the home and family.

Decatur surgeon, RICHARD SMOOT has been appointed by the Governor as one of the ten medical members of the newly reconstituted State Board of Health.

LARRY BREGMAN, Atlanta physician and Jewish community leader, has received a 1964 "Amudin" leadership award from Torah Umesorah, the National Society for Hebrew Day Schools. Presented to Dr. Bregman November 1 at the 21st annual dinner of the society, the award is given each year to leaders in the field of Jewish education.

On October 1 MORRIS E. BRACKETT, Atlanta, assumed his new duties as Director of the Health Conservation Branch of the Georgia Department of Public Health. He succeeds GUY V. RICE, who recently retired.

After November 1, ARTHUR M. PRUCE'S offices will be located in the Medical Arts Building, Atlanta.

Sixth District

THOMAS EARL DUPREE, Macon, has opened an office for the general practice of medicine at the Riverside Clinic at 577 Walnut Street.

Seventh District

J. L. RABB, a practicing physician and surgeon in Calhoun for more than ten years, has become associated with WILLIAM R. THOMPSON and BILL PURCELL in the practice of medicine.

Recently elected as medical staff officers of Hamilton Memorial Hospital, Dalton, were JAMES A. REDFEARN, Vice-President; S. L. SELLERS, Secretary; ELI A. ROSEN, President; R. T. FARROW, Heart Clinic Director; and FORT F. FELKER, JR., Judd Memorial Tumor Clinic Director.

Eighth District

B. H. COGDELL, Alma, recently addressed the Alma Lions Club members on significant facts concerning Medicare.

Ninth District

Several Georgia doctors participated in a special seminar in Gainesville recently entitled the "Medical Aspects of Litigation." Those taking part were P. K. DIXON, Gainesville; JOE DIMON, Atlanta; and GEORGE GISH, Atlanta.

Tenth District

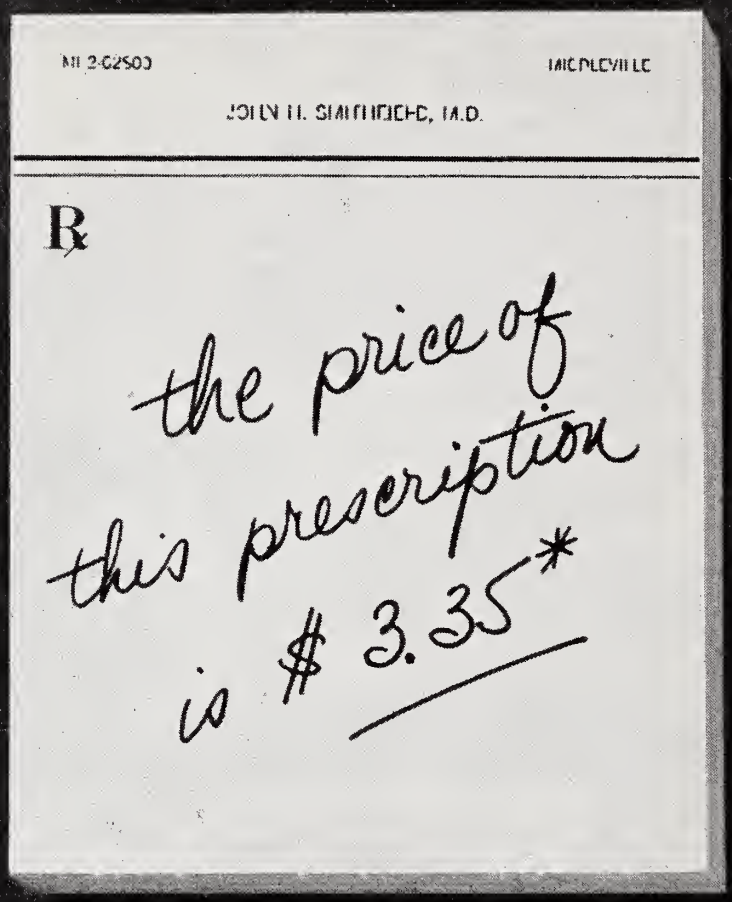
HUBERT MILFORD, Hartwell, was recently named the new President of the Georgia Academy of General Practice. STEWART BROWN of Royston was named to the organization's Board of Directors. Other officers include DON SCHMIDT, Cedartown, President-Elect; and CHARLES C. LAMB, Albany, Vice-President.

A postgraduate symposium on "Musculoskeletal Problems in Children" was held November 10-12 at the Medical College of Georgia. This particular program was coordinated by FLOYD E. BLIVEN, JR. and JAMES W. HARKESS, both Medical College faculty. Guest faculty included J. HIRAM KITE, Atlanta.

Participating from the Medical College of Georgia were JOHN L. CHANDLER, MARIO M. STONE, H. BENTON BRIDGES, GERALD H. HOLMAN, and FRANK P. ANDERSON.

The National Institutes of Health of the U.S. Public Health Service have awarded research grants totaling $77,998 to EDWARD J. H. NATHANIEL and other medical scientists at the Medical College of Georgia. Dr. Nathaniel is the principal investigator in charge of the laboratory.

PERRY P. VOLPITTO of Augusta was installed October 14 as President of the American Society of Anesthesiologists at the society's annual meeting in Bal Harbour, Florida.



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